```
CD0000587 AGENCOURT
CK42948 0/43-03.y
BM842052 K-E5013.y
BM976429 UI-CF-ENI
BD233871 AGENCOURT
CD100397 AGENCOURT
CD100397 AGENCOURT
CD100397 AGENCOURT
CD100527 AGENCOURT
CD100521 AGENCOURT
CD100521 AGENCOURT
CB105123 UI-I-BC1
CD523146 6018-6869
AV417768 Home BB1
BB155561 UI-I-BC1
CD52314 6029-4607
CD10113 AGENCOURT
CD52314 GO29-4607
CD690425 EST118 h
CD69040 EST6948 h
AA572950 nm3303.8
CD69040 EST6948 h
AA572950 nm3303.8
CD69040 EST6948 h
AA572950 nm32806.x
CD69040 EST6948 h
AA572950 nm32801.x
BB196246 601308817
BB253814 6029-4607
CD699640 EST16036
BE392080 GO130712
BB743611 GO15-1712
BB743611 GO15-1712
BB743611 GO15-1712
BB743611 GO15-1712
BB743611 CG25-184911 G
AA57392 AGENCOURT
CD699640 EST16036
BB743611 CG25-171-18
BB743617 EST1803
BB743617 EST1803
AA57392 AGENCOURT
BB743133 6014-10.x
AA683520 ZF34911 G
AA57392 AGENCOURT
BB743133 6014-10.x
AA683520 ZF34911 G
AA743345 WG93111 C
AA743345 WG93111 C
AA743345 WG9311 CA2-MT015
BB612434 601451888
BE612434 601451888
BE612434 601451888
AI5-64623 LP98003.x
BG5673797 GOSSG6141
AA581440 nn703066 B
BB72307 GM22665.8
AA58140 nn70306.8
BB72307 GM22665.8
AA551908 nt189908.8
                                                                                                        CD108133
CB152458
BQ691723
CD690425
AA572950
CD690400
                                                                                                                                                                                                                                                                                                        AW238407
BE184455
AI743345
CD723292
                                                                                            BQ436671
BI253834
                                                                                                                                                           BM704851
BI489624
                                                                                                                                                                                                                                    BG567519
CD683966
                                                                                                                                                                                                                                                             AI638119
AI885550
                                                                                                                                                                                                                                                                                            BF036845
                                                                                                                                                                                                                                                                                                  4A683520
                                                                                                                                                                                                                                                                                                                                                                      4W081599
                                                                                                                                                                                    BE396187
 8899.9
889.2
888.2
888.2
888.2
897.5
897.5
                                                                                                                                                                                                                                                                                                                                                                                                                            87.1
86.9
86.9
86.2
86.2
 υ
                     U
                                                         0000
                                                                                                                                                                                                                                                                                                                                                                                                     O
                                                                                                                                                                                                   AA460433 2x66h04.r
BI490742 603032084
BM768596 K-EST0052
CD600842 EST7365 h
CD707973 EST24500
BX089446 BX089446
CK430164 0145h07.y
BM767014 K-EST0049
                                           ; Search time 2708 Seconds (without alignments) 1776.235 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                          762
1 MKSSGLFPFLVLLALGTLAP......RDLKCCMGMCGKSCVSPVKA 132
                                                                                                                                                                                                                                                                                                                                                                                               Description
                                                                                                                                               65645750
       GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                nucleic search, using frame_plus_p2n model
                                                                                                                                  32822875 seqs, 18219865908 residues
                                                                                                                                             of hits satisfying chosen parameters:
                                                                                                                                                                             Match 0%
Match 100%
first 100 summaries
                                            October 24, 2004, 03:55:11
                                                                                                   0.5
2.0
7.0
0.5
                                                                                                                                                                                                                                                                                                                                                                                                           AA460433
B1490742
BM769596
CD690842
CD707973
BX08430164
BM767014
BM843274
                                                                                                   Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                           length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                               BB
                                                                    US-10-613-105-2
                                                                                                                                                                                                                                                                                      gb_est1::
gb_htc::
gb_htc::
gb_est3::
gb_est4::
gb_est6::
gb_gs81::
gb_gs81::
                                                                                                                                                                                                                                                                                                                                                                                                            593
593
593
593
                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                             Post-processing: Minimum |
Maximum |
Listing
                                                                                             BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                         Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                           1000.0
1000.0
1000.0
1000.0
1000.0
                                                                                                                                                                                                                                                                                EST:*
                                                                                                                                                           Minimum DB seq
Maximum DB seq
                                                                                                                                                                                                                                                                                                                                                                                                           762
762
762
762
762
762
                                                                           Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                               Score
                                                                                             Scoring table:
                                1
                                                                                                                                               Total number
                                OM protein
                                                                                  Sequence:
                                                                                                                                   Searched:
                                                                                                                                                                                                                                                                                Database
                                             <u>6</u>
                                                                                                                                                                                                                                                                                                                                                                                         Result
No.
                                             Run
```

Alignment Scores: 2.82e-60	41 122 61 182 81		2/c B1490742 S34 bp mRNA lin ION 603032084T1 NIH_MGC_115 Homo sapiens CDNA clon mRNA sequence. ON B1490742 B1490742. G1:15329970 S EST. Homo sapiens (human) ISM Homo sapiens (human) Mammalla; Butheria; Primates; Carariata; Verteb Mammalla; Butheria; Primates; Cararrhini; Homi CE 1 (bases 1 to 534) RS NIH-MGC http://mgc.nci.nih.gov/.	TITLE National Institutes of Health, Mammalian Gene Collection (MGC) JOURNAL Unpublished (1999) CONTECT: Robert Strausberg, Ph.D. Email: cgapbe-r@mail.nih.gov Tissue Procurement: Life Technologies, Inc. CDNA Library Preparation: Life Technologies, Inc. CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC Clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Plate: LLAMI1431 row: g column: 22 High quality sequence stop: 534. FRATURES Location/Qualifiers Loganism="Homo sapiens" Mal. Lype="MRNA" Amb.
654 85.8 438 4 BM694113 HM694113 UI-B-CII- 652 85.6 532 2 AW513394 AW513394 Xc44a01.x 648 85.0 433 2 BM694255 BM61355 UI-B-CIP 648 85.0 433 2 BE933366 BM694113 UI-B-CIP 648 84.4 534 1 AIS80185 AIS80185 KI7706.x 643 84.4 534 1 AIS80185 CD708989 EXT2516 640 84.0 558 1 AAB63166 AA8938592 COG000.8 640 84.0 558 1 AA863166 AA938592 COG002.8 652 83.3 515 1 AA863166 AA938592 COG002.8 654 81.9 548 4 BG7851 BG7851 GOZ624211 652 81.6 505 1 AII48713 BG194421 AII48713 GC5301.x 615 80.8 491 1 AIO66534 AIC6634 GOZ6402.x 616 80.8 491 1 AIO66534 AIC6634 GOZ6402.x 617 81.0 74 7 518 7 STATA AT	ALIGNMENTS 460433 477 bp mRNA linear EST 56h04.x1 Soares total feus Nb3HF8 9w Homo sapiens CDI 77 NAN); mRNA sequence.	AA460433.1 GI:2185179 BST. Homo sapiens (human) Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalla; Eutherla; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 47) Hillier,L., Allen,M., Bowles,L., Dubuque,T., Geisel,G., Jost,S., Kucaba,T., Lacy,M., Le,N., Lennon,G., Marra,M., Martin,J.,	Moore, B., Schellenbergy, K., Steptoe, M., Tan, F., Thelbing, B., White, Y., Wylie, T., Waterston, R. and Wilson, R. WashU-Merck EST Project 1997 Unpublished (1997) Washington University School of Medicine 444 Forest park Park Way, Box 8501, St. Louis, MO 63108 Tel: 314 286 1810 Eax: 314 286 1810 Eax: 314 286 1810 Eaxil: set@wastson.wustl.edu This clone is available royalty-free through LLNL; contact the This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information. Seq primer: -28ml3 revo ET from Amersham Location/Qualifiers Location/Qualifiers	1. 477 Corganism="Homo sapiens"
00000 000 00000 00000 0000 0000 0000 0000	SULT 1460433 CUS FINITION	VERSION KEYWORDS SOURCE ORGANISM REFERENCE AUTHORS	TITLE JOURNAL COMMENT PEATURES	Bource

ORIGIN

```
3.28e-60
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match:
DB:
                                                                                                                     source
                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CD690842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
/lab_host="DH10B"
/clone lib="NNH MGC 115"
/note="Organ: pooled brain, lung, testis; Vector:
/note="Organ: pooled brain, lung, testis; Vector:
pcWv-SPORTE; Site_1: Not1; Site_2: EccRV (destroyed); RNA
source anonymous pool of 6 male_brains, age range 23-27; n
male lung, age 27; and 1 male testis, age 69. Library is
oligo-dT primed and directionally cloned (EcoRV site is
destroyed upon cloning). Average insert size 1: 8 kb,
insert size range 1-3 kb. Library is normalized and
enriched for full-length clones and was constructed by C.
Gruber (Invitrogen). Research Genetics tracking code
021. Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BM769596 14K402 Homo sapiens cDNA clone S14K402-16-B10 5',
                                                                                                                                                                                                                                                                                                                                                                                                                406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG 346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                            TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. I (bases 1 to 535)
Kim, N.S., Hahn, Y., Oh, J.H., Lee, J.Y., Ahn, H.Y., Chu, M.Y., Kim, M.R. Oh, K.J., Cheong, J.E., Sohn, H.Y., Kim, J.M., Park, H.S., Kim, S. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                               MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Korea Research Institute of Bioscience & Biotechnology
                                                                                                                                                                                                                                                534
0 0 0 0
0 0 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kim, Y.S.
21C Frontier Korean BST Project 2001
Unpublished (2002)
Contact: Kim YS
Genome Research Center
                                                                                                                                                                                                                                                                                                                              Gaps:
                                                                                                                                                                                                                                                                                                                                                               (1-534)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BM769596.1 GI:19099211
                                                                                                                                                                                                                                                                                                                                                               x BI490742
                                                                                                                                                                                                                                          3.27e-60
762.00
100.00$
100.00$
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       mRNA sequence.
BM769596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                               US-10-613-105-2 (1-132)
                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         285
                                                                                                                                                                                                                                                                                                                                                                                                                              525
                                                                                                                                                                                                                                                                                                                                                                                                                                                            21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                No.:
                                                                                                                                                                                                                                                                                                                Query Match
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                 ORIGIN
```

g

ે

ઠે g ò ద ò g ેં g ð g 셤

ò

```
/mol_type="mRNA"
/db_xref="taxon:9606"
/db_xref="taxon:9606"
/clone="$14402".
/clone="$14402".
/clone="$144402".
/clone="$144402".
/clone="$144402".
/clone="$144402".
/clone="$144402".
/clone="$144402".
/clone="$144402".
/note="$144402".
/note="$14402".
/note="$144402".
/note="
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          82 TGGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGAGTGGAGTCTGTCCTCCTAAGAAATCT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              101 ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          202 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCCAAAC 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         142 ecccaerecerracaracaacaacereaceceacacereaceceacaereceaceaceaace 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22 ATGAAGTCCAGCGGCCTCTTCCCTGGTGCTGCTTGCCCTGGGAACTCTGGCACCT 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MetLygSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TrpAlaValGluGlySerGlyLyBSerPheLygAlaGlyValCysProProLygLyBSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            41 AlaGinCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCCCCCAATTCTGTGAGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC
52 Eceun-dong Yusecong-gu, Daejecon 305-333, South Korea
Tel: +82-42-860-4470
Fax: +82-42-860-4410
Email: yongeungemail.kribb.re.kr
Plate: 16 row: B column: 10
High quality sequence erop: 535.
Location/Qualifiers
1. 535
1. 535
/ organism="House sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-613-105-2 (1-132) x BM769596 (1-535)
```

```
BX089446

Soares_fetal_heart_NbHH19W Homo Bapiens CDNA clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                101 ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              81 ProThrArgArgly8ProGlyLy8Cy8ProValThrTyrGlyGlnCy8LeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        104 resecreresaagscreresaaasrecrreaaascresascresecrererecraaaaarer 163
                                                                            Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (Dasas 1 to 554)
Liu,X.-Q., Zhou,Y., Zhang,L.-J., Xu,H., Chen,H.-K., Pan,Z.-G. and Zeng,Y.-X.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         284 CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCCCCCATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer
                                                                                                                                                                                                                                                                                                                                             /mol_type="mRNA"
/db_xref="taxon:9606"
/tissue type="normal nasopharynx"
/clone_lib="human nasopharynx"
/note="ESTE generated from a normal nasopharynx cDNA
                                                                                                                                                                Transcriptional Gene Expression Profile of Human Nasopharynx
EST24500 human nasopharynx Homo sapiens cDNA, mRNA sequence
                                                                                                                                                                                                                        Sun Yat-sen University
651 DongFeng Road East, GuangZhou 510060, China
Tel: 86-1380-9770-743
Fax: 86-20-8775-4506
Email: yxzeng@gzsums.edu.cn.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               554
0 0 0 0 0 0 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121 MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGTGGGAAATCCTGCGTATCCCCTGTGAAAGCT
                                                                                                                                                                                                                                                                                                                 1. .554
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-613-105-2 (1-132) x CD707973 (1-554)
               CD707973
CD707973.1 GI:32238603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.43e-60
762.00
100.00%
100.00%
                                                            Homo sapiens (human)
                                                                                                                                                                                             Contact: YiXin Zeng
Cancer Center
                                                                                                                                                                               Unpublished (2003)
                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 6
BX089446
LOCUS
DEFINITION
              ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No.:
 DEFINITION
                                                                                                                                                              TITLE
JOURNAL
COMMENT
                                                                                                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
 CD690842 15-JUN-2003 EST725-JUN-2003 EST7355 human nasopharynx Homo sapiens CDNA, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EST 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   53 ATGAAGTCCAGCGCCTCTTCCCCTTCCTGGTGCTGCTTGCCCTGGGAACTCTGGCACCT 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC 352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         113 resecretesaasecercresaaagreerreaaaseresagrererecerecraaaaarer 172
                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. [ bases 1 to 543)
Liu X.-Q., Zhou,Y., Zhang,L.-J., Xu,H., Chen,H.-K., Pan,Z.-G. and Zeng,Y.-X.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCygProProLysLysSer 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC
                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapieng"
/mol_type="mRNA"
/db_xref="taxon:9606"
/tibsue type="normal nasopharynx"
/clone_lib="human nasopharynx"
/note="ESTS generated from a normal nasopharynx cDNA
                                                                                                                                                                               Transcriptional Gene Expression Profile of Human Nasopharynx
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                       Sun Yat-sen University
651 DongFeng Road East, GuangZhou 510060, China
Tel: 86-1380-9770-743
Fax: 86-20-8775-4506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                543
0 0 0
0 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        554 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-613-105-2 (1-132) x CD690842 (1-543)
                                                                                                                                                                                                                                                                                                    Email: yxzeng@gzsums.edu.cn.
Location/Qualifiers
                                           CD690842.1 GI:32211980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.34e-60
762.00
100.00%
100.00%
                                                                         Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                             Unpublished (2003)
Contact: YiXin Zeng
Cancer Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CD707973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             413
 LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ..
9
                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                              TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 5
CD707973
LOCUS
                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

9

40

343

```
1. .583
/ organism="Homo sapiens"
/ mol type="marxns"
/ mol type="marxns"
/ db xrefe"texxxn:9606"
/ clone="0j45h0?"
/ tiseue_type="lacrimal gland"
/ dev stage="lacrimal gland"
/ lab_host="EMDH10B"
/ clone="lorgan: Eye; Vector: pCMVSport6; RNA was extracted
/ clone="lorgan: Eye; Vector: pCMVSport6; RNA was extracted
/ note="Organ: Eye; Vector: pCMVSport6; RNA was extracted
/ note="lorgan: Eye; Vector: pCMVSport6; Roteror(Life Technologies) was
constructed at Bioserve Blotechnology (Laural MD)
essentially following the protocols of the SuperScript
Plaamid System full details of which are contained in the
manufacturer's Instruction manual
(http://www.lifetech.com/). First strand synthesis was
carried out using a Not I primer-adapter
[5'-pGACTAGTTCAGATGGGGGCGCCC(T)15-3']. EST analysis
was performed on the unamplified library at the NIH
Intramural Sequencing Center (NISC)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CK430164 583 bp mRNA linear EST 06-JAN-2004 oj45h07.yl Human lacrimal gland, unamplified: oj Homo sapiens CDNA clone oj45h07 5', mRNA sequence.
                                                                                      81 ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                241 CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC 300
                                                                                                                                                                                                                                                                      101 ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                  301 CCCCCCCATTTCTGTGAGATGGATGGCTGCAGTGCAGGGTGACTTGAAGTGTTGCATGGGC 360
        121 GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota...

Eukaryota...

Eukaryota...

Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 583)

Expressed sequence tag analysis of human lacrimal gland

Unpublished (2002)
                                                          80
                                                       LysArgCysCysProAspThrCysGly11eLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Contact: Wistow G
Section on Molecular Structure and Function
National Eye Institute
(4)31, NIH, Bethesda, MD 20892-2740, USA
Tel: 301 402 3452
Fax: 301 496 0078
Email: graeme@helix.nih.gov
Plate: 45 row: h column: 07
Seq primer: MIRRPI reverse primer (ABI).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    583
132
0
0
                                                                                                                                                                                                                                                                                                                                                                                121 MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                        361 ATGTGTGGGAAATCCTGCGTTTCCCCTGTGAAGCT 396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CK430164.1 GI:40677984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.67e-60
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
Pred. No.:
                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 7
CK430164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
                                                                                                               요
                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The following 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AlaGinCysLeuArgTyrLysLysProGluCysGinSerAspTrpGinCysProGlyLys 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This clone is available royalty-free from RZPD;
contact RZPD (clone@rzpd.de) for further information. Seg primer:
M13r, Primer sequence: TTTCACACAGGAAACAGCTATGAC.
Location/Qualifiers
1. .563
//organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                    Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 ATGAAGTCCAGCGGCCTCTTCCCCTTCCTGGTGCTGCTTGCCTTGGGAACTCTGGGACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGp998015845 ; IMAGE:366950"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      563
132
0
0
0
IMAGD998015845 ; IMAGE:366950, mRNA sequence.
BX089446
BX089446.1 GI:27823826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-613-105-2 (1-132) x BX089446 (1-563)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.51e-60
762.00
100.00$
100.00$
                                                                                                               Homo sapiens (human)
                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        www.rzpd.de
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match:
DB:
                              ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No.:
                                                                                                                                                                                                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DRIGIN
```

셤 ઠે 셤 ઠે

δ

```
I site by treatment of T4 RNA ligase and the first strand cDNA was synthesized from oligo dT-selected mRNA by priming with dT-tailed vector. The dT-tailed vector was adjusted to have about 60nt. The cDNA vector was circularized with E. coli DNA ligase after digestion of ECOR which site is also included in vector. An RNA strand converted to a DNA strand by Okayama-Berg method. The obtained cDNA vectors were used for transformation of competent cells E. coli ToplOF' by electroporation method. The cDNA libraries constructed by this method are full-length enriched cDNA library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BMB43274 597 bp mRNA linear BST 06-MAR-2002 K-EST0121093 S14K402 Homo gapieng cDNA clone S14K402-31-E12 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Euthoria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 597)
1 (bases 1 to 597)
1 (km, N.S., Hahn, Y., Oh, J.H., Lee, J.Y., Ahn, H.Y., Chu, M.Y., Kim, M.R., Oh, K.J., Cheong, J.E., Sohn, H.Y., Kim, J.M., Park, H.S., Kim, S. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101 ProbroAsnPheCyaGluMetAspGlyGlnCyaLyaArgAspLeuLyaCyaWetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     202 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81 ProThrargarglysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   142 gecedárideerradaradadadeergadadeergadadadeergeergreeggdadd 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    322 ccccccarrrcrergagarccarcccacrecaaccergacrreaagrerrccargesc 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 LysargCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21 TrpAlaValGluGlySerGlyLvsSerPheLysAlaGlyValCysProProLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MetLygSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22 ATGAAGTCCAGCGGCCTCTTCCCTTCCTGGTGCTTGCCCTGGGAACTCTGGCACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Contact: Kim YS
Genome Research Center
Koran Reasarch Institute of Bioscience & Biotechnology
52 Eceun-dong Yuseong-gu, Daejeon 305-333, South Korea
                                                                                                                                                                                                                                                                                                                                                                                                                                         593
0000
0000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121 MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  382 ATGTGTGGGAAATCCTGCGGTTTCCCCTGTGAAAGCT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kim, Y.S.
21C Frontier Korean EST Project 2001
Unpublished (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gape:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        x BM767014 (1-593)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BM843274.1 GI:19199697
                                                                                                                                                                                                                                                                                                                                                                                                                                  3.75e-60
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mRNA sequence.
BM843274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-613-105-2 (1-132)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                               ..
No:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 9
BM843274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score:
                                                                                                                                                                                                                                                                                                                                                    DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mol type="mmx" controlled by the property of 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 593)
Kim,N.S., Hahn,Y., Oh,J.H., Lee,J.Y., Ahn,H.Y., Chu,M.Y., Kim,M.R., Oh,K.J., Cheong,J.B., Sohn,H.Y., Kim,J.M., Park,H.S., Kim,S. and Kim,Y.S.
21C Frontier Korean EST Project 2001
Unpublished (2002)
Contact: Kim YS
Genome Research Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BM767014 1593 bp mRNA linear EST 04-MAR-2002
K-EST0049047 S14K402 Homo sapiens CDNA clone S14K402-2-D07 5', mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                              64 TGGGCTGTGGAAGGCTCTGGAAGTCCTTCAAAGCTGGAGTCTGTCCTCCCTAAGAAATCT 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              244 CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                            124 GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 363
                                                                                                                                                                                                                                                           40
                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 LysArgCysCysProAspThrCysGlylleLysCysLeuAspProValAspThrProAsn 80
                                                                                                                                          20
                                                                                                                                                                                                63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                    MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                           21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Korea Research Institute of Bioscience & Biotechnology 52 Eceun-dong Yuseong-gu, Daejeon 305-333, South Korea rel: +82-42-860-4470
                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           364 ATGTGTGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .593
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Fax: +82-42-860-4409
Email: yongaung@mail.kribb.re.kr
Plate: 2 row: D column: 07
High quality sequence stops: 593.
                                                                           US-10-613-105-2 (1-132) x CK430164 (1-583)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BM767014.1 GI:19096629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ведиенсе.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BM767014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 8
BM767014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
```

음

셤

ò 셤 ò 셤

ò

셤

ò

임 à

ò

유

ઠે

321

20 81 40

```
/clone="Invage:3033772"
/clone="Invage:3033772"
/lab host="DH108 (T1 phage-resistant)"
/clone="Invage:3033772"
/clone="Invage:305172"
/clone="Organ: Pooled-Skin; Vector: pDNR-LIB; Site 1: SfiI (ggccattatggcc); Site 2: SfiI (ggccgcctcggcc); Library is oligo-dT primed and directionally cloned. cDNR was prepared from a pooled samples of tissues from Skin, meninges, duramatter, pia matter and choroid plexus.

and 3: adaptores were used in cloning as follows: S. adaptor sequence: S.-CACGGCCATARYGGCC-3' and 3' adaptor sequence: S.-ATTCTAGAGGCCGAGGCGCATG-dT(30)BN-3' (where B = A, C, or G and N = A, C, or J). Average insert size 1.47 kb (range 0.50-4.0 kb). 15/15 colonies contained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palo Alto, CA). Note: this is a NIH_MGC Library"
                                                                                                                                                                                                                                                                                                        Contact: Robert Straueberg, Ph.D.
Email: cgapbs-rémail.nih.gov
Tissue Procurement: Dr. Michel Brownstein and Dr. Miklos Palkovite
Tissue Procurement: Dr. Michel Brownstein and Dr. Miklos Palkovite
CDNA Library Preparation: CLONTECH Laboratories, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: NDCM126 row: o column: 13
High quality sequence stops: 556.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         205 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 264
                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

    (bases 1 to 599)

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 LysArgCysCysProAspThrCysGly1lelysCysLeuAspProValAspThrProAsn 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25 Argaagrecagedecrerrecerrecresersersecresessaarrersecare
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                     NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
    AGENCOURT 13648070 NIH MGC_186 Homo sapiens cDNA clone IMAGE:30323772 5', mRN\overline{\mathrm{A}} sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .599
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-613-105-2 (1-132) x CD000587 (1-599)
                                                                  CD000587.1 GI:30295106
                                                                                                                      Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.8e-60
762.00
100.00$
100.00$
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match:
                                                                          VERSION
KEYWORDS
SOURCE
ORGANISM
       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No.:
                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                    /cloll line="Stategue.sold"
/clol line="Stategue.sold"
/lab_host="Top10F""
/clol line="Stategue.sold"
/clone lib="Stategue.sold"
/clone lib="Stategue.sold"
/clone lib="Stategue.sold"
/clone lib="Stategue.sold"
/note="Organ: Storeach; Vector: pTz18RP1; Site_1: EcoRI;
Site_2: Not1; The poly (A) + RNA was dephosphorylated with
bacterial alkaline phosphatase (BAP) and then decapped
with tabacco acid pyrophosphatase (TAP). The decapped
with tabacco acid pyrophosphatase (TAP). The decapped
intact mRNA was sligated with DNA-RNA linker including EcoR
I site by treatment of T4 RNA ligase and the first strand
cDNA was synthesized from oligo dT-selected mRNA by
priming with dT-tailed vector. The GTA vector was
adjusted to have about 60nt. The cDNA vector was
circularized with E. coll DNA ligase after digestion of
EcoRI which site is also included in vector. An RNA strand
converted to a DNA strand by Okayam-Berg method. The
obtained cDNA vectors were used for transformation of
competent cells E. coll Top10F' by electroporation method.
The cDNA libraries constructed by this method are
full-length enriched cDNA library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EST 01-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    205 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCCAAAC 264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCAACAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC 324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      145 GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCCAGGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LysArgCysCysProAspThrCysGly1leLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25 ATGAAGTCCAGGGGCCTCTTCCCCTTCCTGGTGCTGCCCTGGGAACTCTGGCACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                597
0 0 0
0 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         mRNA
                                                                                                                                                                     organism="Homo sapiens"
Tel: +82-42-860-4470
Fax: +82-42-860-4409
Email: yongsung@mail.kribb.re.kr
Plate: 31 row: E column: 12
High quality sequence stop: 597.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps:
                                                                                                                                                                                                                                          clone="S14K402-31-E12"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ď
                                                                                                                                                                                           /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-613-105-2 (1-132) x BM843274 (1-597)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .79e-60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CD000587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local S.
Query Match:
                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 10
CD000587
LOCUS
                                                                                                                      FEATURES
```

유

ò

g

8

유

δ

셤

ð

유

ò

g ò

δ

9

62

9

80

셤

유

ઠે

```
BM842052 606 bp mRNA linear EST 06-MAR-2002
K-EST0119384 S12SNU216 Homo sapiens CDNA clone S12SNU216-57-G05 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Primatee; Catarrhini; Hominidae; Homo. 1 (bases I to 606) (Kim, N.S., Hahn, Y., Oh, J.H., Lee, J.Y., Ahn, H.Y., Chu, M.Y., Kim, M.R., Cheong, J.E., Sohn, H.Y., Kim, J.M., Park, H.S., Kim, S. and
                                                                                                                                                                                                                                                                                                                         81 ProThrhrgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                    101 ProproganPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysWetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                         303 CCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGGGTGACTTGAAGTGTTGCATGGGC 362
                                                                                                         123 ecccaerdecrivaearacaaeaaccreaereccaeaereacrescaerereccaesere 182
                                                                                                                                                                                                                                                                                 183 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 242
41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                         LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn
                                                                21 TrpAlaValGluGlySerGlyLvsSerPheLysAlaGlyValCysProProLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Genome Research Center
Korea Research Institute of Bioscience & Biotechnology
S2 Eceun-dong Yuseong-gu, Daejeon 305-333, South Korea
Tel: +82-42-860-4470
Fax: +82-42-860-4409
Email: yongsung@mail.kribb.re.kr
Plate: 57 row: G column: 05
High quality sequence stop: 606.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121 MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          363 ATGTGTGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21C Frontier Korean EST Project 2001
Unpublished (2002)
Contact: Kim YS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol type="mRNA" | /mol type="mRNA" | /mol type="mRNA" | /db xref="taxon:9606" | /clone="$12$NU216-57-G05" | /sex="F"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /tissue_type="Lymph node"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cell_type="Epithelial"
|cell_line="SNU-216"
|lab_host="Top10F'"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      organism="Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BM842052.1 GI:19198461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BM842052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kim, Y.S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EST.
                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BM842052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                              ઠે
                                                                                                         셤
                                                                                                                                                      à
                                                                                                                                                                                       셤
                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /clone="Oyacus"
/clone="Oyacus"
/dev_atage="Adult"
/dev_atage="Adult"
/lab host="Embilia"
/lab host="Embilia"
/clone lib="Human lacrimal gland, unamplified: oj"
/clone lib="Human lacrimal gland, unamplified: oj"
/clone seminal glands. A directionally cloned cDNA library in the pcMVSPORT6 vector[Life Technologies) was constructed at Bioserve Biotechnology (Laurel MD)
essentially following the protocols of the SuperScript plasmid System full details of which are contained in the manufacturer's Instruction manual
/http://www.lifetech.com/). First strand synthesis was carried out using a Not I primer-adapter
[5'-pdAcTAGTTAGATCGGAGCGGCCCC(T)]. EST analysis was performed on the unamplified library at the NIH Intramural Sequencing Center (NISC)."
                                                                                                                                                                                                                                                                                                                              CK429948 60-3 bp mRNA linear EST 06-JAN-2004 oj43c03.yl Human lacrimal gland, unamplified: oj Homo sapiens CDNA clone oj43c03.y', mRNA sequence.
                        325 CCCCCCAATITCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 (bases) Lowertage, Frankaters, Catallinni; Hominidae; Hom Dickinson, D., Laurie, G. and Wistow, G.
Expressed sequence tag analysis of human lacrimal gland Unpublished (2002)
Contact: Wistow G. Section on Molecular Structure and Function
National Eye Institute
6/31, NIH, Bethesda, MD 20892-2740, USA
Tel: 301 402 3452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          603
1132
0
0
0
                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Email: graeme@helix.nih.gov
Plate: 43 row: c column: 03
Seg primer: MI3RPl reverse primer (ABI).
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="oj43c03"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-613-105-2 (1-132) x CK429948 (1-603)
                                                                                                                                                                                                                                                                                                                                                                                                                   CK429948.1 GI:40677549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.84e-60
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity:
                                                                                                                                                                                                                                                                                                                                                                                            CK429948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
                                                                                                                                                                                                                                           385
                                                                                                                                                                                                121
                                                                                                                101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match:
DB:
```

source

PEATURES

ACCESSION VERSION KEYWORDS SOURCE ORGANISM

REFERENCE AUTHORS TITLE JOURNAL COMMENT

DEFINITION

RESULT 11 CK429948

유

ò

/clone lib="SI2SNU216"
/note="Organ: Stomach; Vector: pCNS; Site 1: ECORI;
Site 2: Not1; The poly (A)+ RNA was dephosphorylated with
bacterial alkaline phosphatase (BAP) and then decapped
with tabacco acid pyrophosphatase (TAP). The decapped
intact mRNA was ligated with DNA-RNA linker including EcoR
I site by treatment of T4 RNA ligase and the first strand
cDNA was synthesized from oligo dI-selected mRNA by

MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro 20

ઠે

.. 0

ORIGIN

Best Local

Wed

```
101 ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                               (www.openbiosystems.com).
Seg primer: M13 FORWARD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-613-105-2 (1-132) x BM976429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.91e-60
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity:
                                                                                                                                                                  POLYA=Yes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No.:
                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
priming with dT-tailed vector. The dT-tailed vector was adjusted to have about 60nt. The CDNA vector was circularized with E. Coli DNA ligase after digestion of ECORI which site is also included in vector. An RNA strand converted to a DNA strand by Okayama-Berg method. The converted to a DNA strand by Okayama-Berg method. The convertent cells E. coli ToplOf' by electroporation method. The CDNA libraries constructed by this method are full-length enriched CDNA library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BM976429 612 bp mRNA linear EST 21-FEB-2003 UI-CF-ENI-acz-n-15-0-UI.81 UI-CF-ENI Homo sapiens cDNA clone UI-CF-ENI-acz-n-15-0-UI 3', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     261
                                                                                                                                                                                                                                                                                                                                                                                                                                           141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       262 CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           80
                                                                                                                                                                                                                                                                                                                                             20
                                                                                                                                                                                                                                                                                                                                                                                                             40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 612)
Bonaldo,M.F., Lennon,G. and Soares,M.B.
Normalization and subtraction: two approaches to facilitate gene
                                                                                                                                                                                                                                                                                                                                                                          81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      41 AlaGInCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGInCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LysArgCysCysProAspThrCysGly1lelysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           202 AAGAGATGTTGTCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                           21 TrpAlaValGluGlySerGlyLvsSerPheLysAlaGlyValCysProProLysErr
                                                                                                                                                                                                                                                                                                                                                                                                                               82 TGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTCCTAAGAAATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       142 GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG
                                                                                                                                                                                                                                                                                                                                             1 MetlysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                 22 ATGAAGTCCAGCGGCCTCTTCCCCTTCCTGGTGCTTGCCTTGCCCTGGGAACTCTGGCACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            University of Iowa
2024 University of Iowa Med Labs, Iowa City, IA 52242, USA
Tel: 319 356 4866
                                                                                                                                                                                               606
132
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      382 ATGTGTGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 417
                                                                                                                                                                                                                               Conservative:
Mismatches:
Indels:
                                                                                                                                                                                               Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Genome Res. 6 (9), 791-806 (1996)
                                                                                                                                                                                                                                                                               Gaps:
                                                                                                                                                                                                                                                                                                             US-10-613-105-2 (1-132) x BM842052 (1-606)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BM976429
BM976429.1 GI:19594023
                                                                                                                                                                                           3.86e-60
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: McCray, PB
                                                                                                                                                                                                                                          Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                McCray Lab
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   discovery
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97044477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8889548
                                                                                                                                                                                                                               Percent Similarity:
                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
DEFINITION
                                                                                                                                                                                                  ..
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 13
BM976429/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
MEDLINE
PUBMED
COMMENT
                                                                                                                                                DRIGIN
                                                                                                                                                                                                                 Score:
                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
```

```
/nctce="Organ: Lung: Vector: pT7T3-Pac (Pharmacia) with a modified polylinker; Site_1: ECoR I; Site_2: Not I; U1-CF-EN1 is a normalized CDNA library contending the following tissue (a): Primary Lung Cystic Fibrosis Epithelial Cells. The library was constructed according to Bonaldo, Lennon and Soares, Genome Research, 6:791-886, 1996. First strand CDNA synthesis was primed with an oligo-dT primer containing a Not I site. Double stranded CDNA was ligated to an EcoR I adaptor, digested with Not I, and cloned directionally into pT7T3-Pac vector. The oligonacleotide used to prime the synthesis of first-strand CDNA contains a library tag sequence that is located between the Not I site and the (dT)18 tail. The sequence tag for this library is CTGCTCAGGT.

TAG LISSUB=Human Lung Epithelial Cell Lines untreated LPS 6hr Co.EPS 2ND.

TAG_LIB-U1-CF-EN1

TAG_LIB-U1-CF-EN1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /dev_stage="Adult"
/lab_host="DH10B (Life Technologies) (T1 phage resistant)"
/clone_lib="UI-CF-EN1"
Email: paul-mccray@ulowa.edu
Tissue Procurement: Dr. M. J. Welsh, University of Iowa
CDNA Library preparation: Dr. M. Bento Soares, University of Iowa
CDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa
DNA Sequencing by: Dr. M. Bento Soares, University of Iowa
DNA Sequencing by: Dr. M. Bento Soares, University of Iowa
DNA Sequencing by: Dr. M. Bento Soares, University of Iowa
Genetics (www.resgen.com) or from Open Biosystems
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          352 ccaacaaggaggaagccrgggaagrgcccagrgacrrarggccaargrrrgargcrraac 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         412 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81 ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuMsn
                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="texon:9606"
/clone="UI-CF-ENI-acz-n-15-0-UI"
/tissue_type="Primary Lung Cystic Fibrosis Epithelial
Cells"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MetlysSerSerGlyLeuPheProPheLeuValleuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          532 resecreresaagecreresaaagreerreaaageresegrererereereraaaaarer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 LysArgCysCysDroAspThrCysGly1leLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (1-612)
                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
```

셤

음 ઠ

```
Homo sapiens (Housing)

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Eukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

Mational Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-remail.nih.gov

Tissue Procurement: Dr. Michael Brownstein and Dr. Miklos Palkovits cDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

High quality sequence stop: Account the I.M.A.G.E. Consortium/LLNL at:

Location/Qualifiers

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. 760

/organism="Mono sapiens"
/mol_type="mrno"
/mol_type="mrno"
/db_xref="taxon:9606"
/clone="mrnoge:amrno"
/lab_host="DA1088"
/clone="mrnoge:amrno"
/lab_host="DA1088"
/clone="mrnoge:amrno"
/lab_host="DA1088"
/clone="Gran: Pooled-Skin; Vector: pDNR-LIB; Site 1: Sfil
/clone="Gran: PDNR-LIB; Site
                                                                                                                                                                                                                                                                                                                                                                                                        CD103997
AGENCOURT 13980945 NIH MGC_186 Homo sapiens cDNA clone
IMAGE:30371083 5', mRNA sequence.
                                                 191 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           760
132
0
0
                                                                                                                                                                                                                                                             121 MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                           371 ATGTGTGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CD103997.1 GI:30757171
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5.28-60
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CD103997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                    RESULT 15
CD103997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score:
                                                   ð
                                                                                                  g
                                                                                                                                                           ઠે
                                                                                                                                                                                                    쉽
                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                    626 bp mRNA linear EST 02-MAY-2002
AGENCOURT 7579635 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:6057322
BQ232871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="MRASE:605732"
/tissue_type="large cell carcinoma"
/tab_bost="DH10B (phage-resistant)"
/clone_lib="NHH MGC 68"
/note="Organ: lung; Vector: pCMV-SPORT6; Site_1: NotI;
Stre_2: Sal1; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 1.8 kb. Library constructed by Life
Technologies."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Updation (127)

Email: Gapbs-r@mail.nih.gov

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: DCTD/TDF/Gazdar

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov

Plate: LLAM13120 row: j column: 11

High quality sequence stop: 546.
292 CCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 233
                                                                                                                                                                                                                                                                                                                                                                                                                                   Bukaryora, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 626)

NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LysArgCysCysCysProAspThrCysGly1]eLysCysLeuAspProValAspThrProAsn 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        626
132
0
0
0
                                                                            Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-613-105-2 (1-132) x BQ232871 (1-626)
                                                                                                                                                                                                                                                                                                                                               BQ232871.1 GI:20414271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.03e-60
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match:
                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                   RESULT 14
                                                                                                                                                                                                               BQ232871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORIGIN
```

셤

ò

g

ò

셤

ઠે

```
Bukaryota Metacaa; Chordata; Craniata; Vertebrata; Euteleostomi; Bukaryota; Metacaa; Chordata; Craniata; Vertebrata; Euteleostomi; Bukaryota; Metacaa; Primates; Catarrhini; Hominidae; Homo.

1 (Dases 1 to 874)

1 (Dases 1 to 874)

1 NIH-MGC http://mgc.nci.nih.gov/.

1 National Institutes of Health, Mammalian Gene Collection (MGC)

1 Unpublished (1999)

2 Contact: Robert Strausberg, Ph.D.

2 Email: cgappa-rémail.nih.gov

7 Issue Procurement: CLONETECH Laboratories, Inc.

CDNA Library Preparation: CLONETECH Laboratories, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

Plate: LLCM918 row: j column: 18

High quality sequence stop: 594.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BG533465
601860869F2 NIH_MGC_76 Homo sapiens CDNA clone IMAGE:4072049 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81 ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCygLeuMetLeuAan 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           101 ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysWetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      326 CCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGGGTGACTTGAAGTGTTGCATGGGC 385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        146 GCCCAGTGCCTTAGATACAAGAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG 205
(where B = A, C, or G and N = A, C, G, or T). Average insert size 1.47 kb (range 0.50-4.0 kb). 15/15 colonies contained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palo Alto, CA). Note: this is a NIH_MGC Library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    86 redecreredaAgecreredaAAgrecricAAAgeredaAgrererecreeraAAAArer 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             266 CCAACAAGGGGGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                            26 ATGAAGTCCAGCGGCCTCTTCCCCCTTCCTGGTGCTTGCCTTGCCCTGGGAACTCTGGCACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LysArgCysCysProAspThrCysGly1]eLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                     MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                       796
1132
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121 MetCyBGlyLyBSerCyBValSerProValLyBAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGTGTGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 421
                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                          US-10-613-105-2 (1-132) x CD000527 (1-796)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mRNA sequence. _ _ BG533465
BG533465.1 GI:13525005
                                                                                                                                                                                                5.52e-60
762.00
100.00$
100.00$
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                    Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                         No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BG533465
LOCUS
                                                                                                                                                                                                                                  Score:
                                                                                                                                          DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           පු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         용
                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Bukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.

1. (Basea 1 to 796)

SINIH-MGC http://mgc.nci.nih.gov/.

Intional Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Dr. Michael Brownstein and Dr. Miklos Palkovits

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CLONG distribution: MGC clone distribution information can be found through the I.M.A.G.B. Consortium (LLML)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.B. Consortium/LLML at:

http://image.lln.gov

Plate: NDCML20 row: m column: 16

High quality sequence stop: 485.

Location/Qualifiers

Lr. 796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /dlone="IMAGE:3031423"
/lab host="DH10B (T1 phage-resistant)"
/lab host="DH10B (T1 phage-resistant)"
/lab host="DH10B (T1 phage-resistant)"
/clone lib="NIH_MGC_186"
/note="Organ: Pooled-Skin; Vector: pDNR-LIB; Site_1: SfiI
(ggccattatggcc); Site_2: SfiI (ggccgctcggcc); Library is
oligo-dT primed and directionally cloned. CDNA was
prepared from an allocationally cloned. CDNA was
prepared from a pooled samples of tissues from Skin,
meninges, duramatter, pia matter and choroid plexus.
and 3. adaptors were used in cloning as follows: 5'
adaptor sequence: 5'-ACTGCCGATTATGCC.3' and 3' adaptor
sequence: 5'-ATTCTAGAGGCCGAGGCGGCCAATG-dT(30) BN-3'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EST 01-MAY-2003
                                                                                                                                                                202
                                                                                                                                                                                                                                                                                                                                                            265
                                                                                                                                                                                                                                                                                                                                                                                                     ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                CCAACAAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cccccaarrrcrereagaresaresceagesaascereacrreagrerreagrerresaresce 385
                                                                                                                                          40
                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                 LysArgCysCysProAspThrCysG1yIleLysCysLeuAspProValAspThrProAsn 80
                                                                                               82
                                                                                                                                                                                                                                                      GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCGCAGTGCTCCAGGGAAG
                                                                                                                                                                                                                           AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                             AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCTTGACACCCCCAAAC
                                                                                               <u> angaagrecascesceretrecerrecresrecrescaretresceressaacrerescarer</u>
                                                                                                                                          TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CD000527
AGENCOURT 13651909 NIH MGC 186 Homo sapiens cDNA clone
IMAGE:30321423 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="mRNA"
/db_xref="taxon:9606"
             US-10-613-105-2 (1-132) x CD103997 (1-760)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CD000527.1 GI:30295046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CD000527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            386
                                                                                                                                            21
                                                                                                                                                                                     86
                                                                                                                                                                                                                                41
                                                                                                                                                                                                                                                                         146
                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                               206
                                                                                                                                                                                                                                                                                                                                                                                                          81
                                                                                                                                                                                                                                                                                                                                                                                                                                                     266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 16
CD000527
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMMENT
                                                                                                                                                                         a
                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                      셤
                                                                                                                                          ઠ
                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                        ઠે
                                                                                                                                                                                                                                                                                                      ે
                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
```

9

82 40

us-10-613-105-2.rst

```
CF529326
UI-1-BClp-atb-c-09-0-UI.81 NCI CGAP_P13 Homo sapiens cDNA clone
UI-1-BClp-atb-c-09-0-UI3', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121 GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     101 ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysWetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241 ccaacaaggaagaagccrgggaagrgcccagrgacrrarggccaargrraagcrraad
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M. Inferring nonneutral evolution from human-chimp-mouse orthologous
                                                                                                     Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M.
Direct Submitsed on Cargill, M.
Bokwille, MD 20850, USA
Rockville, MD 20850, USA
This sequence was made by sequencing genomic exons and ordering them based on alignment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 TGGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTGCTCCTCCTAAGAATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 ATGAAGTCCAGCGGCCTCTTCCCCTTCCTGGTGCTTGCCTGGGAACTCTGGCACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21 TrpAlaValGluGlySerGlyLysSerPheLyaAlaGlyValCysProProLygLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                394
131
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MetCysGlyLysSerCysValSerProValLys 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene trios
Science 302 (5652), 1960-1963 (2003)
                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol type="genomic DNA"
/db_rref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-613-105-2 (1-132) x AY417768 (1-394)
                                                                                                                                                                                                                                                                                                                                                                             <li...>394
/gene="SLPI"
/locus_tag="HCM6334"
                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CF529326
CF529326.1 GI:34579021
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5.12e-60
758.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
                                                                                          14671302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CF529326/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                        PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                 TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 19
                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                  gene
                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                  ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ਨੇ
                                                                                      /clone="INAGE:4072049"
/lab host="INAGE:4072049"
/lab host="DH10B (T1 phage-resistant)"
/clone=lih="NIH MGC_76"
/clone=lin="NIH MGC_76"
/note="Organ: liver; Vector: pDNR-LiB (Clontech); Site_1:
Sfil (ggccgctcggcc); Site_2: Sfil (ggccattatggcc); S'and
3' adaptors were used in cloning as follows: 5' adaptor
sequence: 5'-CACGGCCATTATGGCC'3' and 3' adaptor sequence:
S'-ATTCTACAGGCCGACATG-GT(30)BN-3' (where B = A,
C, or G and N = A, C, G, or T). Average insert size 1.85
kb (range 1.0-4.0 kb). 15/15 colonies contained inserts
by PCR. This library was enriched for full-length clones
and was constructed by Clontech Laboratories (Palo Alto,
CA). Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                394 bp DNA linear GSS 17-DEC-2003
VIRTUAL TRANSCRIPT, partial sequence,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCCCCCAATTTCTGTGAGATGGATGGAGGCGGGGAGGGTGAGCTTGAAGTGTTGCATGGGC 382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           203 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryotta; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo. I (bases I to 39. Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         143 GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCCAGGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                874
132
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGREGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
                                          organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gape:
                                                         Ltype="mRNA"
xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-613-105-2 (1-132) x BG533465 (1-874)
   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens SLPI gene,
genomic survey sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AY417768
AY417768.1 GI:39773728
                                                                                                                                                                                                                                                                                                                                                                           6.24e-60
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AY417768
                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GSS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                         Bource
                                                                                                                                                                                                                                                                                                                                                                                 М
..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AY417768
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 18
     FEATURES
                                                                                                                                                                                                                                                                                                                             DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                   Score:
```

g

ò

a ð 엄

ò

8 6

ઠે g ઠે 셤

```
Tumor Gene Index
Unpublished (1997)
Contact: Robert Strausberg, Ph.D.
Contact: Robert Strausberg, Ph.D.
Tissue Procurement: Dr. Steven Brown
Tissue Procurement: Dr. Steven Brown
CDNA Library preparation: Dr. M. Bento Soares, University of Iowa
DNA Sequencing by: Dr. M. Bento Soares, University of Iowa
Clone Distribution: Clone distribution information can be obtained
from Dr. M. Bento Soares, bento-soares@ulowa.edu
Seg primer: M13 FORWARD
POLYA=Yes.
                                                                                                                                                                                                                                                            BU753561
UI-1-BC1-ajl-e-04-0-UI.sl NCI CGAP_Pl2 Homo sapiens cDNA clone
UI-1-BC1-ajl-e-04-0-UI 3', mRNA sequence.
ProThrArghrgLy8ProGlyLy8Cy8ProValThrTyrGlyGlnCy8LeuMetLeuAsn 100
                                   351 ccaacaaggaggaagccrgggaagrgcccagrgacrrargcccaargrrrgargcrraac 292
                                                                                                             291 ccccccarrrrcrereaearecareccaereccasecereacrreaegrerecarece 232
                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.
1 (bases 1 to 598)
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                         101 ProProAmpheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                598
131
1
                                                                                                                                                TAG_TISSUE=placenta human 8 week
TAG_LIB=UI-1-BC1
TAG_SEQ=GA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               bento-soares@uiowa.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                       BU753561.1 GI:23711685
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  758.00
100.00%
99.24%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
Pred. No.:
 81
                                                                                                                                                                                                                                                BU753561/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
COMMENT
                                                                                                                                                                                                                              RESULT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                             ઠે
                                                                                                     g
                                                                                                                                                  ò
                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                     Jocation/Qualifiers

1. .597

(Organiam="Memoo sapiens"

(Ab_Xref="taxon:9606"

/Clone="Ul-1-BCID-atb-c-09-0-UI"

/ Lisue_type="Placenta"

/ dev_stage="8-9 weeks"

/ lab_host="Uplacenta"

/ dev_stage="8-9 weeks"

/ lab_host="Uplacenta"

/ lone="Organ: Placenta"

/ lone="Organ: Placenta"

/ clone lib="NoI CGAP P13"

/ clone lib="NoI Contain and Soares, denome Research, digested with an oligo-dT primer containned no EcoR I adaptor, digested with an oligo-dT primer containned library tag sequence that is located between the NoI I site and the (dT)18 tail. The sequence tage for this library are GA, AGGAA. For additional information, contact: Bento Soares,

TAG_INSUE=placenta human 8 week

TAG_INSUE=placenta human 8 week

TAG_INSUE=Placenta human 8 week
                                                                                                           Unpublished (1997)
Contact: Robert Strausberg, Ph.D.
Contact: Robert Strausberg, Ph.D.
Tissue Procurement: Dr. Steven Brown
CDNA Library preparation: Dr. M. Bento Soares, University of Iowa CDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa CDNA Sequencing by: Dr. M. Bento Soares, University of Iowa Clone Distribution: Clone distribution information can be obtained from Dr. M. Bento Soares, bento-soares@uliowa.edu
Seg primer: M13 FORWARD
POLYA=YES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         471 GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG 412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        41 AlaGlnCysLeuArgTyrLysLysBroGluCysGlnSerAspTrpGlnCysBroGlyLys 60
                 Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo. I (basea 1 to 597)
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TrpAlaValGluGlySerGlyLyBSerPheLyBAlaGlyValCy8ProProLy8Ly8Ser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         597
131
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-613-105-2 (1-132) x CF529326 (1-597)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8.84e-60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               758.00
100.00%
99.24%
99.48%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match:
DB:
   ORGANISM
                                                       REFERENCE
AUTHORS
TITLE
                                                                                                                                 JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
```

```
/dev. gtagge="Adult"
//dev. gtagge="Adult"
//lab_host="DH/0B (Life Technologies) (T1 phage resistant)"
//clon=lib="U1-CF-ENI"
//note="Organ: Lung; Vector: pT7T3-Pac (Pharmacia) with a
//note="Organ: Lung; Vector: pT7T3-Pac (Pharmacia) with a
modified polylinker; Site_1: EcoR I; Site_2: Not I;
U1-CF-ENI is a normalized CDNA library containing the
following tisgue(e): Primary Lung Cystic Fibrosis
Epithelial Cells. The library was constructed according to
Bonaldo, Lennon and Soares, Genome Research, 6:791-806,
1956. First strand CDNA synthesis was primed with an
oligo-dT primer containing a Not I site. Double stranded
CDNA was ligated to an ECoR I adaptor, disested with Not
I, and cloned directionally into pT7T3-Pac vector. The
oligonuclactide used to prime the synthesis of
first-strand cDNA contains a library tag sequence that is
located between the Not I site and the (dT)18 tail. The
sequence tag for this library is CTGTCAGGT.
TAG_TISSUE=Human Lung Epithelial Cell Lines untreated LPS
6hr Co LPS 24h
TAG_LB=U1-CF-ENI
TAG_SEQ=CTGCTCAGGT"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    UI-1-BCIP-atb-b-03-0-UI.31 NCI CGAP_P13 Homo sapiens CDNA clone UI-1-BCIP-atb-b-03-0-UI.3', mRNA sequence.
CFS29317.1 GI:34579012 EST.
Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          81 ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      101 ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        472 GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     412 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    352 CCAACAAGGAAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                292 CCCCCCAATTTCTGTGAGATGGATGGACGTGAAGCGTGACTTGAAGTGTTGCATGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21 TrpAlaValGluGlySerGlyLvsSerPheLysAlaGlyValCysProProLysLysSer
    /clone="UI-CF-EN1-aeg-o-21-0-UI"
/tissue_type="Primary Lung Cystic Fibrosis Epithelial
Cells"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           599
131
000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121 MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 x CB305723 (1-599)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8.88e-60
758.00
100.00%
99.24%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-613-105-2 (1-132)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 22
CF529317/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        University of lowa and Labs, Iowa City, IA 52242, USA 2024 University of Iowa Med Labs, Iowa City, IA 52242, USA Tel: 319 356 4866

Fax: 319 356 7171

Email: paul-mccray@uiowa.edu
Tissue Procurement: Dr. M. J. Welsh, University of Iowa CDNA Library preparation: Dr. M. Bento Soares, University of Iowa CDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa DNA Sequencing by: Dr. M. Bento Soares, University of Iowa Clone Distribution: Researchers may obtain clones from Research Genetics (www.resgen.com) or from Open Biosystems
(www.openbiosystems.com).
Seg primer: M13 FORWARD
POLYA-Yes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CB305723 599 bp mRNA linear EST 04-MAR-2003 UI-CF-EN1-aeg-o-21-0-UI.81 UI-CF-EN1 Homo sapiens CDNA clone UI-CF-EN1-aeg-o-21-0-UI 3', mRNA sequence.
                                                                                                                                                                                                                       472
                                                                                                                                                                                                                                                                                                                                                                   ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 232
                                                                                                                         412
                                                                                                                                                                                                                                                                                                                                                                                                                                                           351 CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC 292
                                                                                                                                                                          TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysEysSer 40
                                                                                                                                                                                                                                                                                                                                      LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo. I (basea 1 to 599)
Bonaldo, M.F., Lennon, G. and Soares, M.B.
Normalization and subtraction: two approaches to facilitate gene
                                                                                                                                                                                                                                                                                     GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCGTGTCTCCAGGGAAG
                                                                                                                                                                                                               TGGGCTGTGGAAAGCTCTTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCT
                                                                                                                                                                                                                                                          AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                  MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
    00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indela:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .599
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                      Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Genome Res. 6 (9), 791-806 (1996)
                                                             (1-598)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CB305723.1 GI:28846234
                                                         US-10-613-105-2 (1-132) x BU753561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Contact: McCray, PB
  99.48%
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              McCray Lab
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                discovery
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97044477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8889548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     231
                                                                                                                                                                              21
                                                                                                                                                                                                                     531
                                                                                                                                                                                                                                                              41
                                                                                                                                                                                                                                                                                                   471
                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                 411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                    81
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 21
CB305723/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
MEDLINE
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                   셤
                                                                                                                                                                            ð
                                                                                                                                                                                                                 요
                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                 요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
                                                                                                ò
                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
```

473

9

40

413

80

353

293

100 293

```
CD685198 623 bp mRNA linear EST 25-JUN-2003
EST1718 human nasopharynx Homo sapiens cDNA, mRNA seguence.
CD685198
                                                                                                                                       292 ccccccaarircrereagaregaregecaereceaecereaecreaererrecarece 233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       81 ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      164 ecccasificertrasaracaasaacercaacreccasagrescrescasistereccasseas 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     224 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

1. (Dases 1 to 623)

Liu, X.-Q., Zhou, Y., Zhang, L.-J., Xu, H., Chen, H.-K., Pan, Z.-G. and Zeng, Y.-X.

Transcriptional Gene Expression Profile of Human Nasopharynx
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LysArgCysCysProAspThrCysGlylleLysCysLeuAspProValAspThrProAsn 80
81 ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn
                                             352 CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC
                                                                                          21 TrpAlaValGluGlySerGlyLyBSerPheLyBAlaGlyValCyBroProLyBLyBSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          104 TGGGCTGTGGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MetlysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      44 ATGAAGTCCAGCGGCCTCTTCCCCTTCCTGGTGCTGCTTGCCTGGGAACTCTGGCACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   // . . 623
/organisma-Homo sapiens"
/mol_type="mRNA"
/tissue type="normal nasopharynx"
/clone lib="human nasopharynx"
/note="EXTS generated from a normal nasopharynx cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unpublished (2003)
Contact: YiXin Zeng
Cancer Catter
Sun Yat-sen University
651 DongFeng Road East, GuangZhou 510060, China
Pat: 86-130-9770-743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          623
131
0
0
                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-613-105-2 (1-132) x CD685198 (1-623)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Email: yxzeng@gzsums.edu.cn.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                       CD685198.1 GI:32200931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9.35e-60
758.00
100.00%
99.24%
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                     EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                 RESULT 23
CD685198
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORIGIN
                                                                                                                               셤
                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                ద
                                                                                            ò
                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ૅ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers

1. 607

1. 607

| Cordination | Continuation 
                                                                                                                                  Tumor Gene Index.

Unpublished (1997)
Contact: Robert Strausberg, Ph.D.

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-remail.nih.gov
Tissue Procurement: Dr. Steven Brown
CDNA Library preparation: Dr. M. Bento Soares, University of Iowa
DNA Sequencing by: Dr. M. Bento Soares, University of Iowa
Clone Distribution: Clone distribution information can be obtained
from Dr. M. Bento Soares, bento-soares@uiowa.edu
Seg primer: M13 FORWARD
POUNA=Yes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  resecretesaasecreresaaserecricaaaseresasererererecrerasaaarer 473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCCAGTGTCCCAGGGAAG 413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AlaGinCysLeuArgTyrLysLysBroGluCysGlnSerAspTrpGlnCysProGlyLys 60
                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo. I (basea Lo 607)
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 607
131
1
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-613-105-2 (1-132) x CF529317 (1-607)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .03e-60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         758.00
100.00%
99.24%
99.48%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match:
DB:
ORGANISM
                                                                   REFERENCE
AUTHORS
TITLE
                                                                                                                                                             JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
```

103

163

셤

ò

셤

ઠે

```
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Mammalia, Eutheria, Primates; Catarrhini; Hominidae; Homo.
El (Dasse 1 to 589)
NIH-WGC http://mgc.nci.nih.gov/.
L Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: DCTD/DTP/Gazdar
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC. Clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
lighty:/image.llnl.gov
Location/Qualifiers
Location/Qualifiers
                                                                                                                                                                                                                            BQ436671 589 bp mRNA linear EST 24-MAY-2002
AGENCOURT 7776044 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:6024344
5., mRNA Bequence.
BQ436671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
/mol_type="mRNA"
/mol_type="mRNA"
/db_xref="taxon:9606"
/cione="ImAGE:604344"
/tissue_type="large cell carcinoma"
/tissue_type="large cell carcinoma"
/tish_bost="DHIOB (phage-resistant)"
/clone_lib="NHH MGC_68"
/note="Organ: lung; Vector: pCMV-SPORT6; Site_1: Not1;
Site_2: SalI; Cloned unidirectionally. Primer: Oligo dr.
Average insert size 1.8 kb. Library constructed by Life
Technologies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               63 GCTGTGGAAGGCTCTGGAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCTGCC 122
303 CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCACTGTTTGATGCTTAAC 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlnCysLeuArgTyrLysLysEroGluCysGlnSerAspTrpGlnCysProGlyLysLys 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   101 ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22 AlavalGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSerAla
                                                                 363 CCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               589
131
0
0
0
                                                                                                                121 MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                      423 ATGTGTGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-613-105-2 (1-132) x BQ436671 (1-589)
                                                                                                                                                                                                                                                                                                     BQ436671.1 GI:21175747
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.07e-59
757.00
100.00%
100.00%
99.34%
                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match:
                                                                                                                                                                                     BQ43671
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                 ð
                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                  ò
                                                                                                                                                                                                                                                      EST 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ProThrArgArgLy8ProGlyLyckCy8ProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            resecretesaasecreresaaasreerreaaaseresasrererererereraasaarer 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                183 GCCCAGTGCCTTAGATACAAGAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG 242
                                                                                                  344 CCCCCCAATTTCTGTGAGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | TrpAlaValGluGlySerGlyLysSerPheLyaAlaGlyValCysProProLysLysSer 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys 60
                                                                                                                                                                                                                                                                                                                                                                                    Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi, Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo. Liu, Ka-Q., Zhou, Y., Zhang, L.-J., Xu, H., Chen, H.-K., Pan, Z.-G. and Zeng, Y.-X.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro 20
 /tiāsue_type="normal nasopharynx"
/clone_lib="human nasopharynx"
/note="ESTS generated from a normal nasopharynx cDNA
library from southern Chinese"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Transcriptional Gene Expression Profile of Human Nasopharynx
Unpublished (2003)
Contact: YiXin Zeng
                                                                                                                                                                                                                                                    CD689844 S24 bp mRNA linear EST 25-
EST6167 human nasopharynx Homo sapiens CDNA, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Concac...
Cancar Center
Sun Yat-sen University
651 DongFeng Road East, GuangZhou 510060, China
1el: 86-1380-9775-4506
Eax: 86-20-8775-4506
Email: yxzeng@qzsums.edu.cn.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   524
131
0
0
                                                                                                                                       MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                         404 Argreregeaaarcerecerrecerereaaacer 439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:

    .524
    /organism="Homo sapiens"
/mol_type="mRNA"
    /db_xref="taxon:9606"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-613-105-2 (1-132) x CD689844 (1-524)
                                                                                                                                                                                                                                                                                                             CD689844.1 GI:32210005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9.21e-60
757.00
99.24%
99.24%
                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           243
                                                           101
                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match:
DB:
                                                                                                                                                                                                                                                  LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   No.:
                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                RESULT 24
CD689844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGIN
```

ΩP

8

셤

8

유

ò

셤

ò

B &

쉱

ò

셤

8

셤

ઠે

```
S EXT.

Homo sapiens (human)

Homo sapiens sapiens sapiens sapiens sapiens sapiens such according to the sapient such according to the such according to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organiam="Homo sapiens"
/mol_type="mRNA"
/db xrefe="taxon:9606"
/db xrefe="taxon:9606"
/clone="InAGE:31068824"
/tissue_type="Pituitary"
/tab host="INAGE:31068824"
/clone=lib="NIH_MGC_179"
/clone="lib="NIH_MGC_179"
/note="Organ: brini" Vector: pCMV-SPORT6.1; Site_1: ECORV (destroyed); Site_2: Not1; Library is oligo-dT primed and directionally cloned (EcoRV site is destroyed upon cloning). Average insert size 1.1 kb. Library was constructed by (Invitrogen). Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CD108133 610 bp mRNA linear EST 15-MAY-2003
AGENCOURT 13979498 NIH MGC_179 Homo sapiens cDNA clone
IMAGE:30368824 5', mRNA sequence.
                                     63 GCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCTGCC 122
                                                                                                                                82 ThrargarglysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsnPro 101
                                                                                                                                                                                                                                                                                                                                      243 ACAAGGAGGAGGACCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAACCCC 302
                                                                                                                                                                                                                                                                                                                                                                                                                                         303 CCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGCATG 362
                                                                                                                                                                                                                                                                                                                                                                                                               102 ProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysMetGlyMet 121
  41
                                                                                                     61
                                                                                                                                                                                                      81
22 AlavalGluGlySerGlyLyBSerPheLyBAlaGlyValCyBroProLyBLyBSerAla
                                                                                                                                                                                                      ArgCysCysProAspThrCysGly11eLysCysLeuAspProValAspThrProAsnPro
                                                                                                     GlnCysLeuargTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLysLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    610
131
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    122 CysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CD108133.1 GI:30761307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.12e-59
757.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score:
Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       363
                                                                                                     42
                                                                                                                                                                                                        62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CD108133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                 ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                     셤
                                                                                                     ò
                                                                                                                                        g
                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                           ઠ
                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

E 1 (bases 1 to 608)

NIH-MC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

L Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Preparation: MCC Clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

Clone distribution: MGC Clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

High quality sequence stop: 567.

Location/Qualifiers

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BI253834 608 bp mRNA linear EST 17-JUL-2001 602974607F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:5113920 5', mRNA sequence.
                                                     AGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAACCCA 242
                                                                                                                                                              243 ACAAGGAGGAGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAACCCC 302
                                                                                                                                                                                                                                                           ThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsnPro 101
                                                                                                                                                                                                                                ProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGlyMet 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /tissue_type="cervical carcinoma cell line"
/lab_host="DH10B"
/clone_lib="NIH MGC_12"
/note="Organ: cervix; Vector: pCMV-SPORT6; Site_1: Not1; Site_2: Sal1; Cloned unidirectionally. Primer: Oligo dT. Average insert size 1.4 kb. Library prepared by Life Technologies."
                             81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaProTrp 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsnPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 608
131
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                         CysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                    363 TGTGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .608
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:5113920"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (1-608)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BI253834.1 GI:14805650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-613-105-2 (1-132) x BI253834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.12e-59
757.00
100.00%
100.00%
99.34%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BI25383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N
                                                                             183
                                                                                                                                                                                                                                102
                                                                                                                                                                                                                                                                                      303
                             62
                                                                                                                                82
                                                                                                                                                                                                                                                                                                                                         122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BI253834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
```

ઠ

ò d ò g

```
Site 2: Not1; The poly (A)+ RNA was dephosphorylated with bacterial alkaline phosphatase (BAP) and then decapped with tabacco acid pyrophosphatase (TAP). The decapped intact mRNA was ligated with DNA-RNA linker including ECORI site by treatment of T4 RNA ligase and the first strand CDNA was synthesized from oligo dT-selected mRNA by priming with dT-tailed vector. The cdT-tailed vector was adjusted to have about 60nt. The cDNA vector was circularized with E. coli DNA ligase after digestion of ECORI which site is also included in vector. An RNA strand converted to a DNA strand by Okayama-Berg method. The convertent cells E. coli Toplof' by electroporation of competent cells E. coli Toplof' by electroporation method. The cDNA libraries constructed by this method are full-length enriched CDNA library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DUDVI/23 906 bp mRNA linear EST 15-JUL-2002
AGENCOURT_8046219 NIH_MGC_110 Homo sapiens cDNA clone IMAGE:6209402
5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              81 ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             101 ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               323 CCCCCCAATTCTGTGAAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Butheria, Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 906)

NIH-MGC http://mgc.nci.nih.gov/.
National institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 LysArgCysCysProAspThrCysGly1leLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          263 CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23 ATGAAGTCCAGCGGCCTCTTCCCCCTTCCTGGTGCTGCTTGCCCTGGGAACTCTGGCACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            83 TGGGCTGTGGAAGGCTCTGGAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  612
131
0
1
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Argreggaaarcerecerricecerereaager 418
                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             x CB152458 (1-612)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BQ691723.1 GI:21817039
                                                                                                                                                                                                                                                                                                                                                                            1.13e-59
757.00
99.24%
99.34%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-613-105-2 (1-132)
                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BQ691723
                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      383
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                    ..
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 29
BQ691723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                      DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CB152458 612 bp mRNA linear EST 29-JAN-2003
K-EST0209654 C1SNU17 Homo sapiens cDNA clone C1SNU17-39-E09 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. [1 (bases 1 to 612)]
Kim, N.S., Hahn, Y., Oh, J.H., Lee, J.Y., Ahn, H.Y., Chu, M.Y., Kim, M.R., Oh, K.J., Cheong, J.E., Sohn, H.Y., Kim, J.W., Park, H.S., Kim, S. and Kim, Y.S.
                                                                                                                                                                                                                     61 GCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCTGCC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ProAsnPheCysGluMetAspGlyGlnCysLysAzgAspLeuLysCysCysMetGlyMet 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGCTG 360
                                                                                                                                                                                                                                                                                                                    CAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAGAAG 180
                                                                                                                                                                                                                                                                                                                                                                                                   181 AGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAACCCA 240
                                                                                                                                                                                                                                                                                                                                                                                                                                            101
                                                                                                                                                     9
                                                                                                                                                                                           AlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProLysLysSerAla 41
                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                             ArgCysCysProAspThrCysGly11eLysCysLeuAspProValAspThrProAsnPro 81
                                                                                                                                        AAGTCCAGCGGCCTCTTCCCCTTCCTGGTGCTTGCTTGGGAACTCTGGCACCTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                     ThrargarglysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsnPro
                                                                                                            LysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaProTrp
                                                                                                                                                                                                                                                                            GlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLysLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /clone_lib="cisNu17"
/note="Organ: Cervix; Vector: pCNS-D2; Site_1: EcoRI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21C Frontier Korean EST Project 2001
Unpublished (2002)
Contact: Kim YS
Genome Research Center
Korea Research Institute of Bioscience & Biotechnology
Solution Cong Yuseong-gu, Daejeon 305-333, South Korea
          00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CysGlyLysSerCysValSerProValLysAla 132
          Indel8:
                               Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tel: +82-42-860-4470
Fax: +82-42-860-4409
Email: yongsung@mail.kribb.re.kr
Plate: 39 row: E column: 09
High quality sequence stop: 612.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="C1SNU17-39-E09"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /tissue_type="Uterine"
/cell_type="Epithelial"
/cell_line="SNU-17"
                                                                      (1-610)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 host="Top10F'"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CB152458
CB152458.1 GI:28137412
                                                                      US-10-613-105-2 (1-132) x CD108133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
Homo sapiens
        99.34$
6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /sex="F"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         mRNA sequence.
                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                             22
                                                                                                                                                                                                                                                                              42
                                                                                                                                                                                                                                                                                                                                                             62
                                                                                                                                                                                                                                                                                                                                                                                                                                            82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
        Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CB152458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMENT
```

엄

ठे

ò 8 ò 용

g ò В

ઠે

262

202 9

8

142

20 82 40

FEATURES

```
582 bp mRNA linear EST 12-SEP-1997 nm33a03.81 NCI CGAP Lip2 Homo sapiens cDNA clone IMAGE:1061932 similar to gb:X04470 ANTILEUKOPROTEINASE 1 (HUMAN);, mRNA sequence. AA572950 GI:2347478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          81 ProThrArgArgLy8ProGlyLy8Cy8ProValThrTyrGlyGlnCy8LeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   101 ProproAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (base 1 to 541)
Liu. X.-Q., Zhou, Y., Zhang, L.-J., Xu, H., Chen, H.-K., Pan, Z.-G. and Zeng, Y.-X.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 LysArgCysCysProAspThrCysGly1leLysCysLeuAspProValAspThrProAsn 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             243 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    303 CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       363 ccccccaartricigidadargeargeccagigeaagcgreactreaagrericarges
                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
/mol_type="mkNa"
/db_Xref=""teaxon:9606"
/tisque_type="normal nasopharynx"
/clone_lib="human nasopharynx"
/note="ESTs generated from a normal nasopharynx"
library from southern Chinese"
                                                                                                                    Transcriptional Gene Expression Profile of Human Nasopharynx
Unpublished (2001)
Contact: YiXin Zeng
                                                                                                                                                                       Cancer Center
Sun Yat-sen University
51 Dongleng Road Bast, GuangZhou 510060, China
651 BongPeng Road Bast, GuangZhou 510060, China
Tel: 86-1380-9770-743
Fax: 86-20-8775-4506
Email: yxzeng@gzsumms.edu.cn.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          541
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGIGGGAAATCCTGCGTTTCCCCTGTGACAGCT 458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-613-105-2 (1-132) x CD690425 (1-541)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.19e-59
756.00
99.24%
99.24%
Homo sapiens (human)
                                                                                                                                                                                                                                                                                                        1. .541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 31
AA572950
LOCUS
DEFINITION
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No.:
                                                                                                                      TITLE
JOURNAL
COMMENT
                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    음. 장
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                          /organism="Homo sapiens"
/mol_type="mRNA"
/db_zref="txxxxxn:9606"
/clone="InAGE:6209402"
/tissue_type="ductal carcinoma, cell line"
/lab host="bluble (phage-resistant)"
/clone lib="NIH MGC_110"
/clone lib="Nih Millor lib"
/clone lib laboratory of Gerald M. Rubin (University Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-CDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies).
Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EST 55-JUN-2003
EST6948 human nasopharynx Homo sapiens cDNA, mRNA sequence.
CD690425
EST6965.1 GI:32211162
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsnPro 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGlyMet 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCTGCC 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGCATG 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ArgCy8Cy8ProAspThrCy8Gly1leLy8Cy8LeuAspProValAspThrProAsnPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaProTrp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AlavalGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSerAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GinCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLysLys
                                                                     þe
         CDNA Library Preparation: Rubin Laboratory
CDNA Library Preparation: Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequenocing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLCM3168 row: k column: 03
Plate: LLCM3168 row: k column: 03
Plate: LLCM3168 row: k column: 03
Plate: LLCM011fiere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             906
131
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-613-105-2 (1-132) x BQ691723 (1-906)
 Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.89e-59
757.00
100.00%
100.00%
99.34%
                                                                                                                                                                              1. .906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score:
Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 122
```

Query Match: DB:

음

ò

g

ઠે

g

ઠે

g

ઠે

g ò 셤

ò

No.

ORIGIN

302

242

9

362

422

LOCUS DEFINITION ACCESSION VERSION KEYWORDS

RESULT 30 CD690425

ठ

us-10-613-105-2.rst

```
D 582 bp mRNA linear EST 25-JUN-2003 human nasopharynx Homo sapiens CDNA, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ProThrargarglyBroGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   242 AAGAGATGTTGTCCTGACGTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 80
                                                                                                                                                                                                               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.

1. (bases 1 to 582)

Liu, X.-O., Zhou, Y., Zhang, L.-J., Xu, H., Chen, H.-K., Pan, Z.-G. and Zeng, Y.-X.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysGysMetGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MetLysSerSerGlyLeuPheProPheLeuValLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   122 resecretesaasecretesaaasteerreaaaseresastersteereereeraasaarer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41 AlaGlnCysLeuArgTyrLysLysBroGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          302 ccaacaacaaccaaccrcccaaacrcccacrcaarrarccccaarcrrraac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
/mol_type="mkNA"
/db_xref="teaxon:9606"
/tiseue type="normal nasopharynx"
/clone_lib="human nasopharynx"
/note="ESTs generated from a normal nasopharynx"
library from southern Chinese"
                                                                                                                                                                                                                                                                                                                 Transcriptional Gene Expression Profile of Human Nasopharynx
Unpublished (2001)
Contact: YiXin Zeng
                                                                                                                                                                                                                                                                                                                                                                                                               GuangZhou 510060, China
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           582
131
0
0
0
ATGTGTGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121 MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps:
                                                                                                                                                                                                                                                                                                                                                                          Cancer Center
Sun Yat-sen University
5un Yat-sen University
651 DongFeng Road East, GuangZl
Tel: 86-1380-9770-743
Fax: 86-20-8775-4506
Fax: 86-20-8775-4506
Email: yzceng@gseums.edu.cn.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-613-105-2 (1-132) x CD690400 (1-582)
                                                                                                                                  CD690400
CD690400.1 GI:32211112
                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2e-59
754.00
99.24*
99.24*
                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
                                                                                               CD690400
                                                                                                                 EST6923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match:
DB:
                                                                                            LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No.:
                                                                                                                                                                                                           ORGANISM
                                                                                                                                ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                   TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
                                                         RESULT 32
CD690400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                            Lumpublished (1997)
Contact: Robert Strauberg, Ph.D.
Contact: Robert Strauberg, Ph.D.
Contact: Robert Strauberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: L. Jeffrey Medeiros, M.D., Michael R.
Emmert-Buck, M.D., Ph.D.
cDNA Library Preparation: David B. Krizman, Ph.D.
cDNA Library Preparation: David B. Krizman, Ph.D.
cDNA Library Preparation: Orlong Greg Lennon, Ph.D.
cDNA Sequencing by: Washington University Genome Sequencing Center
Clone distribution: NCI-CGAP clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
www-bio.llnl.gov/bbrp/image/image.html
Insert Length: 448 Std Error: 0.00
Seq primer: -40ml3 fwd. ET from Amersham
High quality sequence stop: 437.
                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="mcNA"
/mol_type="mcNA"
/dol_type="mcNA"
/dol_type="mcNA"
/lab_bost=bliposarcoma"
/lab_bost=bliposarcoma"
/lab_bost=bliposarcoma"
/lab_bost=bliposarcoma
/clone_lib="NCI CGAP Lip2"
/note="vector: pAMPIO; mRNA made from liposarcoma, cDNA
made by oligo-dT priming. Non- directionally cloned.
Size-selected on agarose gel, average insert size 600 bp.
Reference: Krizman et al. (1996) Cancer Research
56:5380-5383."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCT 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTTGACACCCCCAAAC 248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AlaGInCysLeuArgTyrLysLysBroGluCysGlnSerAspTrpGlnCysBroGlyLys 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LysArgCysCysProAspThrCysGly11eLysCysLeuAspProValAspThrProAsn 80
                                      Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 582)
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              582
131
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121 MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                1. .582
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-613-105-2 (1-132) x AA572950 (1-582)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.31e-59
756.00
99.24%
99.24%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
No
                       ORGANISM
                                                                        REFERENCE
AUTHORS
TITLE
                                                                                                                                                 JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DRIGIN
```

g

8 ò

ò

8 6

g

ò

셤

ò

윤

ે

ઠે

```
/organism="Homo sapiens"

/mol_type="mRNA"

/db_tref="txxxon:9606"

/clone="type="RPE and Choroid"

/tissue_type="RPE and Choroid"

/dev stage="adult"

/dab_host="bH10B"

/lab_host="bH10B"

/lab_host="bH10B"

/lab_host="bH10B"

/lab_host="bH10B"

/lab_host="bH10B"

/lab_host="bH10B"

/lab_host="lab_host="tieng"

/lab_host="tieng"

/lab_h
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BM694343
UI-E-CII-afp-h-21-0-UI.rl UI-E-CII Homo sapiens cDNA clone
UI-E-CII-afp-h-21-0-UI 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Email: Denco-goares@ulowa.edu
Tissue Procurement: Dr. Gregg Hageman
TONA Library preparation: Dr. M. Bento Soares, Univeristy of Iowa
CDNA Library Arrayed by: Dr. M. Bento Soares, Univeristy of Iowa
DNA Sequencing by: Dr. M. Bento Soares, Univeristy of Iowa
Clone Distribution: Researchers may obtain clones from Research
Genetics (www.resgen.com).
                                                                                                                                                                                                                                                                                                                          81 ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                265 ccaacaaggaggaaggcraggaagracccagraacrrarggccaargrragargcrraac 324
                                                                                                        325 CCCCCCAATTTCTGTGAGGTGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 384
85 TGGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCT 144
                                                                                                                                                                                                                                                      205 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 493)
Bonaldo,M.F., Lennon,G. and Soares,M.B.
Normalization and subtraction: two approaches to facilitate gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                          101 ProproAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly
                                                                41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                             61 LysargCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Coordinated Laboratory for Computational Genomics
University of Iowa
375 Newton Road , 4156 MEBRF, Iowa City, IA 52242, USA
Tel: 319 335 8250
Fax: 319 335 9565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Genome Res. 6 (9), 791-806 (1996) 97044477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BM694343.1 GI:19007601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Contact: Soares, MB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              discovery
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BM694343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8889548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
MEDLINE
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 34
BM694343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                            8
                                                                                                               g
                                                                                                                                                                            ठे
                                                                                                                                                                                                                                                      원
                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                유
                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /unl type="mRNN" septems
/unl type="mRNN"
/ub xref=thaxon:866"
/clone="lMAGE:6653451"
/tissue_type="mixed (pool of 40 RNAs)"
/tissue_type="mixed (pool of 40 RNAs)"
/lab_host="DH10B (T1-phage-resistant)"
/clone=libe=nXH MGC126"
/clone=libe=nXH MGC126"
/clone=libe=nXH MGC126"
/clone=type=mixed (pool of 40 cell line polyA+ RNAs (bladder prepared from a pool of 40 cell line polyA+ RNAs (bladder 2*, blood - 33 4*, brant - 5.6*, breast - 12.5*, colon - 4*, connective tissue - 1.4*, eye - 1*, intestine - 2.6*, kidnney - 2.2*, liver - 5.7*, lung - 10.8*, NK.cell - 5.2*, ovary - 4*, pharynx - 2.5*, prostate - 4.3*, salivary gland - 1.3*, and skin - 2.3*, . 5' and 3' adaptors were used in cloning as follows:
                                                                                                        BU927919
AGENCOURT 10434154 NIH MGC 126 Homo sapiens cDNA clone
IMAGE:6553451 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5'-AACCAGTGGTATCAACGCAGAGTGGCCATTACGGCCGG-3' and 5'-AATCTAGAGGCCGAGGCGCGCGATTACGGCCGGG-3'. Full-length enriched library was constructed using the Clontech creator SMART kit and size-selected to contain the 0.5-1 kb size fraction (other fractions present in NIH MGC 127 and NIH MGC 128). Library created in the laboratory of T. Usdin, M.D., Ph.D. (NIMH, NIH). Note: this is a NIH_MGC
                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Enkaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
I mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
I (bases 1 to 633)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1990)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: NCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25 ATGAAGTCCAGCGCCCTCTTCCCTGGTGCTGCTTGCCTGGGAACTCTGGCACCT 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysEysSer 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CDNA Library Preparation: Michael Brownstein Laboratory CDNA Library Preparation: Michael Brownstein Laboratory CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Plate: LLCM2903 row: i column: 03
High quality sequence stop: 553.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       633
131
0
0
0
      422 ATGTGTGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-613-105-2 (1-132) x BU927919 (1-633)
                                                                                                                                                                                                                                                                BU927919.1 GI:24116649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2.23e-59
754.00
99.24%
99.24%
                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match:
                                                                                                                                                                                                                                                                VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                  ACCESSION
                                                                      RESULT 33
                                                                                                        BU927919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DRIGIN
```

ઠ g us-10-613-105-2.rst

```
Email: bento-soares@uiowa.edu
Tissue Procurement: Dr. Gregg Hageman
CDNA Library preparation: Dr. M. Bento Soares, Univeristy of Iowa
CDNA Library Arrayed by: Dr. M. Bento Soares, Univeristy of Iowa
DNA Sequencing by: Dr. M. Bento Soares, Univeristy of Iowa
Clone Distribution: Researchers may obtain clones from Research
Genetics (www.resgen.com).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGTCCTGACACTTGTGGGCATCAAATGCCTGGATCCTGTTGACACCCCAAACCCAACAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         84 ArglysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsnProProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaProTrpAlaVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3 AGGGGCTCTTCCCCTTCCTGGTGCTGCTTGCCTGGGAACTCTGGCACCTTGGGCTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      44 LeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLysLysArgCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAGAAGAGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                64 CysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsnProThrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           104 PheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGlyMetCysGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 303 ricigigadarggarggccagrgcaagcgrgacrrgaagrgrrgcargggcargrggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             567
0
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                  /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           363 AAATCCTGCGTTTCCCCTGTGAAGCT 389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-613-105-2 (1-132) x BM704851 (1-567)
                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6.888-59
748.00
100.00%
100.00%
98.16%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No.:
                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BM704851 567 bp mRNA linear EST 28-FEB-2002
UI-E-CII-afp-h-21-0-UI.r2 UI-E-CII Homo sapiens cDNA clone
UI-E-CII-afp-h-21-0-UI 5', mRNA sequence.
adaptor, digested with Not I, and cloned directionally into pT7T3-Pac vector. The oligonucleotide used to prime the synthesis of first-strand cDNA contains a library tag sequence that is located between the Not I site and the (dT)18 tail. The sequence tag for this library is ACCTA. This library was created for the program, Gene Discovery in the Visual System, supported by National Eye Institute (NEI)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ArglysProGlyLysCysProValThrTyrClyGlnCysLeuMetLeuAsnProProAsn 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGGAAGCCTGGGAAGTGCCCCAGTGACTTATGGCCAATGTTTGATGCTTAACCCCCCCAAT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysRysEtGlyMetCysGly 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         123 CTTAGATACAAGAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAGAAGAGATGT 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAACCCAAAGG 242
                                                                                                                                                                                                                                                                                                                                                                                                              GAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCTGCCCAGTGC 122
                                                                                                                                                                                                                                                                                                                                                   62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cy8ProAspThrCysGly1leLysCy8LeuAspProValAspThrProAsnProThrArg 83
                                                                                                                                                                                                                                                                                                                                                                               GluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSerAlaGlnCys 43
                                                                                                                                                                                                                                                                                                                                                                                                                                            LeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLysLysArgCys 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo. (1 (bases 1 to 567)
Bonaldo, M.F., Lennon, G. and Soares, M.B.
                                                                                                                                                                                                                                                                                                                     SerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaProTrpAlaVal
                                                                                                                                                                                                                                                                                                                                      AGCGGCCTCTTCCCCTTCCTGGTGCTGCTTGCCCTGGGAACTCTGGCACCTTGGGCTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Soares, MB
Coordinated Laboratory for Computational Genomics
University of Iowa
375 Newton Road , 4156 MEBRF, Iowa City, IA 52242, USA
Tel: 319 335 8250
Fax: 319 335 9565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                  4493
000
000
000
                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAATCCTGCGTTTCCCCTGTGAAAGCT 389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Genome Res. 6 (9), 791-806 (1996)
97044477
                                                                                                                                                                                                                                                             Gaps:
                                                                                                                                                                                                                                                                                         US-10-613-105-2 (1-132) x BM694343 (1-493)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BM704851.1 GI:19018109
                                                                                                                                                                                5.73e-59
748.00
100.00%
100.00%
98.16%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              discovery
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BM704851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8889548
                                                                                                                                                                       Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             243
                                                                                                                                                                                                                                                                                                                                                                                  24
                                                                                                                                                                                                                                                                                                                                                                                                              63
                                                                                                                                                                                                                                                                                                                                                                                                                                             44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  363
                                                                                                                                                                                                                                           Query Match
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                     ..
90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                       Alignment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BM704851
                                                                                                                                       DRIGIN
                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                               8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        중 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
```

122

63

43

23 62 182

242 103 302

83

```
Mindon sapiens (indusing)

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Bukaryota; Metazoa; Chordata; Cararrhini; Hominidae; Homo.

I (bases 1 to 575)

Manmalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

Mational Cancer Institute / National Institute of Neurological

Disordars and Stroke, Brain Tumor Genome Anatomy Project

(CGAP/BTGAP), Tumor Gene Index

Unpublished (1998)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.ini.gov

Tissue Procurement: Chris Moskaluk, M.D., Ph.D., Michael R.

Emmert-Buck, M.D., Ph.D., CDNA Library Preparation: Life

Technologies, Inc. CDNA Library Arrayed by: Christa Prange,

I.M.A.G.E. Consortium DNA Sequencing by: Washington University

Genome Sequencing Center

Clone distribution: NCI-CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

www-bio.llnl.gov/bbrp/image.html
                                                                                                                                                                                                                                                                                                                                                                         AW264225 ST5 bp mRNA linear EST 28-DEC-1999 xq99c06.x1 NCI_CGAP_Brn53 Homo sapiens cDNA clone IMAGE:2758762 3' similar to gb:X04470 ANTILEUKOPROTEINASE 1 (HUMAN);, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          258 AGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAACCCCCCAAT 317
                                                                                                      123
                                                                                                                                  /clome_lib="NCI_CGAP_Brn53"
/note="Organ: brain; Vector: pCMV-SPORT6; Site_1: SalI;
Site_2: NotI; Cloned unidirectionally. Primer: Oligo dT.
Library constructed by Life Technologies."
ArglysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsnProProAsn
                                                                                                      104 PheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysGCysMetGlyMetCysGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /clone="MAGE:2758762"
/tissue_type="three_pooled_meninglomas"
/lab_host="DH108"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Possible reversed clone: polyT not found
Seg primer: -40Up from Gibco
High quality sequence stop: 411.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                  124 LysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                              Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-613-105-2 (1-132) x AW264225 (1-575)
                                                                                                                                                                                                                                                                                                                                                                                                                                             AW264225
AW264225.1 GI:6641126
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8.67e-59
747.00
98.47%
98.47%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
Pred. No.:
  84
                                                                                                                                                                                                                                                                        378
                                                                                                                                                                                                                                                                                                                              RESULT 37
AW264225/c
                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DRIGIN
                                                                                                            ò
                                                                                                                                                용
                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠ
                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

E 1 (bases 1 to 962)

NIH-MGC http://mgc.nci.nih.gov/.

Dubublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Inc.

CLONA Library Preparation: Library Preparation Library Preparation L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /lone_lib="NHH MGC 115"
/clone_lib="NHH MGC 115"
/note="Organ: pooled brain, lung, testis; Vector:
pCMV-SPORT6; Site_1: Not1; Site_2: EcoxV (destroyed); RNA
source anonymous pool of 6 male brains, age range 23-27; 1
male lung, age 27; and 1 male testis, age 69. Library is
oligo-dT primed and directionally cloned (EcoxV site is
destroyed upon cloning). Average insert size 1:8 kb,
insert size range 1-3 kb. Library is normalized and
enriched for full-langth clones and was constructed by C.
Gruber (Invitrogen). Research Genetics tracking code
021. Note: this is a NIH_MGC Library."
                                                BI489624 962 bp mRNA linear EST 28-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAGAAGAGATGT 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18 AGGGGCCTCTTCCCCTTCCTGGTGCTGCTTGCCCTGGGAACTCTGGCACCTTGGGCTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaProTrpAlaVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GluGlySerGlyLysSerPheLysAlaGlyValCysProProLysEysSerAlaGlnCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LeuargTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLysLysArgCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CysProAspThrCysGlylleLysCysLeuAspProValAspThrProAsnProThrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            962
129
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .962
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:5173293"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-613-105-2 (1-132) x BI489624 (1-962)
                                                                                                                                                                  BI489624.1 GI:15328852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.38e-58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        748.00
100.00%
100.00%
98.16%
                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                            mRNA sequence.
BI489624
                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               64
                                                      LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No.:
                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                        AUTHORS
TITLE
JOURNAL
RESULT 36
BI489624
                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                          COMMENT
```

셤

ઠે

g

∂

g

ઠ

ò

```
ECORI which site is also included in vector. An RNA strand converted to a DNA strand by Okayama-Berg method. The obtained cDNA vectors were used for transformation of competent cells E. coli ToplOF' by electroporation method. The cDNA libraries constructed by this method are full-length enriched cDNA library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BE396187 483 bp mRNA linear EST 21-JUL-2000 601308817F1 NIH_MGC_44 Homo sapiens CDNA clone IMAGE:3626789 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               81 ProfhrangarglysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          277 CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC 336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          217 AAGAGATGTTACCCCGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          337 ccccccantricrereadaresaresccaerecaacereacrreaagrerrecaresec 396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 483)
Nath-MGC http://mgc.nci.nih.gov/
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                             41 AlaginCysieuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      157 GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGACTGGAGTGTCCAGGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 LysArgCysCysProAspThrCysGlylleLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly
                                                                                                                                                                                                                                                                                                                                                                                                                         21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDNA Library Preparation: Ling Hong/Rubin Laboratory CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can l found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov. b column: 06 High quality sequence start: 5
                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                   Indel8:
                                                                                                                                                                                                                                                                       Gaps:
                                                                                                                                                                                                                                                                                                          US-10-613-105-2 (1-132) x CB151317 (1-580)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BE396187.1 GI:9341552
EST.
                                                                                                                                                                         1.08e-58
746.00
98.48%
98.48%
97.90%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mRNA sequence.
                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BE396187
                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      397
                                                                                                                                                                                                                                                       Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                             Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 39
BE396187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
                                                                                                                    DRIGIN
                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /cell_type="Epithalial"
/cell_line="SNU-17"
/lab_nost="SNU-17"
/lab_nost="Topplof"
/lab_nost="Topplof"
/coll_line="SNU-17"
/coll_line="SNU-17"
/clone_lib="CiSNU17"
/clone_lib="CiSNU17"
/clone_lib="CiSNU17"
/clone_lib="CisNU17"
/clone="Organ: Cervix, Vector: pCNS-D2; Site_l: EcoRI;
Site_2: Not!; The poly (A) + RNA was dephosphorylated with
bacterial alkaline phosphatase (RAP) and then decapped
with tabacco acid pyrophosphatase (RAP). The decapped
intext mRNA was ligated with DNA-RNA linker including
EcoRI site by treatment of T4 RNA ligase and the first
strand cDNA was synthesized from oligo dT-selected mRNA by
priming with AT-tailed vector. The dT-tailed vector was
adjusted to have about 60mt. The cDNA vector was
circularized with E. coli DNA ligase after digestion of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CB151317 58-0 bp mRNA linear EST 29-JAN-2003 K-EST0208192 C1SNU17 Homo sapiens cDNA clone C1SNU17-28-C11 5',
                                                                                                                                                       ACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAACCCC 274
     ProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGlyMet 121
                                                                                                                                                                                                                                                                                                                               CCCAATTTCTGTGAGATGGATGGAGGTGAAGCGTGACTTGAAGTGTTGCATGGGCATG 214
                                                                                                                    453 CAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCCAGGGAAGAAG 394
                                                                                                                                                                                                                                  ThrargarglysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsnPro 101
                                                                                 61
                                                                               CysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Fax: +82-42-860-4409
Email: yongeung@mail.kribb.re.kr
Plate: 28 row. C column: 11
High quality sequence stop: 580.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /clone="C1SNU17-28-C11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tissue_type="Uterine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CB151317.1 GI:28135601
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    . .580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mRNA sequence.
CB151317
                                                                                 42
                                                                                                                                                                                                                                  82
                                                                                                                                                                                                                                                                       333
                                                                                                                                                                                                                                                                                                            102
                                                                                                                                                                                                                                                                                                                                               273
                                                                                                                                                                                                                                                                                                                                                                                    122
                                                                                                                                                                                                                                                                                                                                                                                                                         213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 38
CB151317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
```

9

40

20 96

g

ઠે 셤

g

8

g

a ò 셤 ઠે

ò

216

80

```
/organism="Homo sapiens"

/mol_type="mRNN"

/db_xref="taxon:9606"

/db_xref="taxon:9606"

/clone="InAGE:562394"

/tissue_type="endometrium, adenocarcinoma cell line"

/lab_hoft="NHH MGC_44"

/clone lib="NHH MGC_44"

/clone="Organ: uterus; Vector: pOTB7; Site_1: Xho1; Site_2:

ECORI; CDNA made by oligo-dT priming. Directionally

cloned into ECORI/Kho1 sites using the following 5'

adaptor: GGCACGAG(G) Library constructed by Ling Hong

in the laboratory of Gerald M. Rubin (University of

California, Berkeley) using ZAP-cDNA synthesis kit

(Stratagene) and Superscript II RT (Life Technologies)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BE743613 557 bp mRNA linear EST 15-SEP-2000 601573751F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3834636 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          86 ProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsnProProAsnPheCys 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      106 GluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGlyMetCysGlyLysSer 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 reregaaagreerreaaageregagreereereereeraagaaarergeeeagreeerraga 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AspThrCysGlylleLysCysLeuAspProvalAspThrProAsnProThrArgArgLys 85
                                                      CDNA Library Preparation: Ling Hong/Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLCM305 row: h column: 03
High quality sequence start: 4
High quality sequence stop: 560.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 CTCTTCCCCTTCCTGGTGCTGCCTTGCCCTGGGAACTCTGGGACTCTTGGCTGTGGAAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26 SerGlyLysSerPheLysAlaGlyValCysProProLysLysExAlaGlnCysLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241 ccressaagrecccagreacrraresccaarerrrearecrraaccccccaarrrcrer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301 GAGATGGATGGCCAGTGCAAGCGTGAAGCTTGAAGTTTCCATGGGCATGTGTGGGAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaProTrpAlaValGluGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   46 TyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLysLysArgCysCysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   581
0
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-613-105-2 (1-132) x BE392080 (1-581)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CysvalSerProvalLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361 recerricecerereaaacer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5.92e-58
738.00
100.00%
100.00%
96.85%
                                                                                                                                                                                                                                                                  1. 581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 41
BE743613
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ..
02
                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                              /db xref="taxon:9606"
/clone="IMAGE:3626789"
/tiseuc_type="endometrium, adenocarcinoma cell line"
/tab_host="endometrium, adenocarcinoma cell line"
/lab_host="DH10B (phage-resistant)"
/clone lib="NIH MGC 44"
/note="Organ: uterus; Vector: pOTB7; Site_1: XhoI; Site_2:
BcoRI; cDNA made by oligo-dT priming. Directionally
cloned into EcoRI/XhoI sites using the following 5'
adaptor: GGCACGAG(G). Library constructed by Ling Hong
in the laboratory of Gerald M. Rubin (University of
California, Berkeley) using ZAP-cDNA synthesis kit
(Stratagene) and Superscript II RT (Life Technologies)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BE392080 581 bp mRNA linear EST 21-JUL-2000 601307712F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3625394 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsnProPro 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94 GIGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTCAAGAATCTGCCCAG 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGlyMetCys 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               334 AATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGCATGTGT 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 581)
1 (hases 1 to 581)
1 Nat-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SerSerGlyLeuPheProPheLeuValLeuAlaLeuGlyThrLeuAlaProTrpAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ValGluGlySerGlyLysSerPheLysAlaGlyValCysProFroLysLysSerAlaGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLysLysArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                154 recerradaracaadaaacerdagreecadagreacreecagreacedagada
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGGAAATCCTGCGTTTCCCCTGTGAAAGCT 423
                                                            /organism="Homo sapiens"
  High quality sequence stop: 481.
Location/Qualifiers
                                                                               /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-613-105-2 (1-132) x BE396187 (1-483)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BE392080 GI:9337445
                                                                                                                                                                                                                                                                                                                                                                                                        3.04e-58
740.00
98.46%
98.46%
97.11%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BE392080
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                          .. oN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                       FEATURES
                                                                                                                                                                                                                                                                                                                                                    ORIGIN
```

g

ð

셤

ò

Вb

ठ

요

ò

셤

ጵ

d

ò

ò

300

65

9 45

```
Eukaryota, Metazoa; Chordata, Craniata; Vertebrata; Euteleostomi; Eukaryota; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

S. (Dases 1 to 583)
S. NIH-MGC http://mgc.nci.nlh.gov/.

In Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.inih.gov
Tissue Procurement: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Prayaration: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /lan_local_in="Milk" MGC 115"

/clone_local_oral_mark
/note="Organ: pooled brain, lung, testis; Vector:
pCMV-SPORTs; Site_l: Not!; Site_2: EcoRV (destroyed); RNA
source anonymuse pool of 6 male brains, age range 23.27; 1
male lung, age 27; and 1 male testis, age 69. Library is
nligo-dT primed and directionally cloned (EcoRV site is
destroyed upon cloning). Average insert size 1.8 kb,
insert size range 1.3 kb, Library is normalized and
enriched for full-langth clones and was constructed by C.
Gruber (Invitrogen). Research Genetics tracking code
021. Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                       BI819626 583 bp mRNA linear EST 04-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62 GGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCTGCCCAGTGCCTTAGATAC 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaProTrpAlaValGluGlySer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 TICCCCTTCCTGGTGCTGCTTGCCCTGGGAACTCTGGCACCTTGGGCTGTGGAAGGCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              47 LysLysProGluCysGlnSerAspTrpGlnCysProGlyLysLysArgCysCysProAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27 GlytysSerPhelysAlaGlyValCysProProLysLysSerAlaGlnCysLeuArgTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     found through the I.M.A.G.B. Consortium/LLNL at: http://image.llnl.gov
Plate: LLAM1145 row: 1 column: 16
High quality sequence stop: 562.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         583
126
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="TMAGE:5175127"
/lab_host="DH108"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-613-105-2 (1-132) x BI819626 (1-583)
                                    127 ValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                          BI819626.1 GI:15931176
                                                                             362 GTTTCCCCTGTGAAAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.39e-57
734.00
100.00%
100.00%
96.33%
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    . .583
                                                                                                                                                                                                                                                                                                             mRNA sequence.
BI819626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                  LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                         RESULT 42
BI819626
                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .557
/ organism="Momo sapiens"
/mol_type="mRNA"
/db xref="taxon:966"
/db xref="taxon:966"
/clone="IMAGE:3834636"
/tlssue_type="adenocarcinoma cell line"
/tlssue_ty
                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

E 1 (bases 1 to 557)

E 1 (bases 1 to 557)

E 1 (bases 1 to 557)

I (bases 1 to 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsnProFroAsnPheCysGlu 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MetAspGlyGlnCysLysArgAspLeuLysCysCysMetGlyMetCysGlyLysSerCys 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              122 AAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAGAAGAGATGTTGTCCTGAC 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAACCCCCCCAATTTCTGTGAG 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         47 LyslysProGluCysGlnSerAspTrpGlnCysProGlyLysLysLysArgCysProAsp 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlyLysSerPheLysAlaGlyValCysProProLysLysSerAlaGlnCysLeuArgTyr 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7 PheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaProTrpAlaValGluGlySer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rrccccrrccragracracrifacccragaaacrcragcaccrrragacraragacrcr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-613-105-2 (1-132) x BE743613 (1-557)
BE743613
BE743613.1 GI:10157605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.316-57
734.00
100.00$
100.00$
                                                                                                          Homo sapiens (human)
                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match:
                                    VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No.:
                                                                                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
```

g

ઠે g ઠે a

ઠે g ò a ò

မွ

40

ద ò 셤 ઠે 요 ઠે g

```
DEZ/1401
601140427F1 NIH_MGC_9 Homo sapiens CDNA clone IMAGE:3049710 5',
mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81 ProfirargarglysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            101 ProproAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysMetGly 120
                                                                                                                                                                                      262 CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      322 ccccccaarrrcrgrgagarggargcccagrgcaagcgrgacrrgaagrgrrgcarggg 381
                                                                                                                                                                                                                                                                                                                                                                                                                                        61 LysArgCysCysProAspThrCysGly1leLysCysLeuAspProValAspThrProAsn 80
                                                              23 AngaAgriccAgcGGCCTCTTCCCTTCCTGGTGCTGCTTGCCCTGGGAACTCTGGCACCT 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1. (Dases 1 to 793)

NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ontract: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov
Tissue Procurament: DCTD/DTP

CDNA Library Preparation: Ling Hong/Rubin Laboratory

CDNA Library Preparation: Ling Hong/Rubin Ling

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

Cloud through the I.M.A.G.E. Consortium/LLNL at: image.llnl.gov

Plate: LLCM94 row: e column: 07

High quality sequence stop: 577.
                                                                                                                                        21 TrpAlaValGluGlySerGlyLysSerPheLyaAlaGlyValCyaProProLyaLysSer
                                                                                                                                                                                                                                                                                                                               41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121 MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         382 ArgreregeaAArcerecerrecerereAAAeer 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BE271401
BE271401.1 GI:9145136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 44
BE271401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /clone="Introduction of the properties of the pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BG484664 170 bp mRNA linear EST 21-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The state of the s
                                                                  241
                                                                                                                                               106
                                                                                                                                                                                                                                                                                            107 MetAspGlyGlnCysLysArgAspLeuLysCysMetGlyMetCysGlyLysSerCys 126
                                                                                                                                                                                                                                                                                                                                   302 ATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGCATGTGGGAAAATCCTGC 361
                                                                                                                                                                                                                  242 GGGAAGIGCCCAGIGACTIAIGGCCAAIGTIIGAIGCTIAACCCCCCCAATITCTGIGAG 301
86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                            GlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsnProProAsnPheCysGlu
                                                                      182 ACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAACCCAACAAGGAGGAAGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   770
131
0
1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              362 GTTTCCCCTGTGAAAGCT 379
                                                                                                                                                                                                                                                                                                                                                                                                                                                   127 ValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BG484664.1 GI:13416943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2.47e-57
733.00
99.24%
99.24%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BG484664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EST.
                                                                                                                                               87
67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match:
DB:
```

source

FEATURES

VERSION KEYWORDS SOURCE ORGANISM

TITLE JOURNAL COMMENT REFERENCE AUTHORS

DEFINITION

RESULT 43 BG484664 ACCESSION

ORIGIN

US-10-613-105-2 (1-132) x BG484664 (1-770)

Pred. No.:

Score:

ORIGIN

ò g à a 8 B 8

8 S 셤 ठ g ેં a

```
Search
Job tim
                                                                                                  ò
                                                                                                                      셤
                                                                                                                                                               g
                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                ద
                                                                                                                                              ઠે
                                                                                                                                                                                        8
                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                       CD699640 511 bp mRNA linear EST 25-JUN-2003 EST16036 human nasopharynx Homo sapiens CDNA, mRNA sequence. CD699640 GI:32228866 EST.
                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                            LysCysProValThrTyrGlyGlnCysLeuMetLeuAsnProProAsnPheCysGluMet 107
                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                 87
                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                      67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. Liu, X.-Q., Zhou, Y., Zhang, L.-J., Xu, H., Chen, H.-K., Pan, Z.-G. and Zeng, Y.-X.
                                                                                                               27
                                                                                                                                   61
                                                                                                                                                                                                    242 AAGTGCCCCAGTGACTTATGGCCAATGTTTGATGCTTAACCCCCCCAATTTCTGTGAGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="mRNA"
/db_xref="taxon:9606"
/tiseue_type="normal nasopharynx"
/clone_lib="human nasopharynx"
/note="ESTS generated from a normal nasopharynx cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Transcriptional Gene Expression Profile of Human Nasopharynx
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unpublished (2003)
Contact: YiXin Zeng
Contact: YiXin Zeng
Concer Center:
Sun Yazenen University
651 DongFeng Road East, GuangZhou 510060, China
Tel: 86-1380-9775-4536
Email: yxzeng@gzsums.edu.cn.
Location/Qualifiers
          793
1125
0
0
0
         Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
                                                                                      US-10-613-105-2 (1-132) x BE271401 (1-793)
                                                                                                                                                                                                                                                                                                                                                                                     7.42e-57
728.00
100.00%
100.00%
95.54%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                              Percent Similarity:
Best Local Similarity:
Alignment Scores:
                                                                                                                                                                                                                                                                                             88
                                                     Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 45
CD699640
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOUNCE
ORGANISM
          Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                      Score:
```

```
100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                     103
                                                                                                                                                                                                                                                163
                                                                                                                                                                                                                                                                                                              223
                                                                                                                                                                                                                                                                                                                                                                            283
                                                                                                                                                                                                                                                                                                                                                                                                                                        343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     403
                                                                                                                                                                                                                    40
                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                             80
                                                                                                                                                                                                                                                                                                                                                                                                         104 TGTGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATC
                                                                                                                                                                                                                                                                                                 164 TGCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAA
                                                                                                                                                                                                                                                                                                                                                               224 GAAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100 nProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGl
                                                                                                                                                      1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                     44 Argaagrecagegecterrecerrecresses argangerecressas archestace
                                                                                                                                                                                                                  21 Trp-AlaValGluGlySerGlyLy8SerPheLy8AlaGlyValCy8ProProLy8Ly8Se
                                                                                                                                                                                                                                                                                40 rAlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLy
                                                                                                                                                                                                                                                                                                                                             60 BLysargCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        344 CCCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGGGTGACTTGAAGTGTAGCATGGG
             511
0
0
1
1
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120 yMetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   440
           Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                          (1-511)
                                                                                                                        US-10-613-105-2 (1-132) x CD699640
      6.37e-57
726.00
97.74%
97.74%
                                       Percent Similarity:
Best Local Similarity:
Query Match:
DB:
Alignment Scores:
Pred. No.:
```

completed: October 24, 2004, 05:52:24 le : 2736 secs

```
Sequence 143, App
Sequence 1529, App
Sequence 863, App
Sequence 1, Appli
Sequence 125, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 7, Apply Sequence 124, App Sequence 122, App Sequence 121, App Sequence 17, App Sequence 17, App Sequence 11, App Sequence 11, App Sequence 11, App Sequence 15, App Sequence 16, App Sequence 16, App Sequence 16, App Sequence 17, App Sequence 15, App Sequence 17, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 431, App
Sequence 153, App
Sequence 20587, A
Sequence 15, Appl
Sequence 3, Appl
                                                                                                                                                                                                     , App
19, Ap
Appli
                                                                                                                                                Sequence 141, Applemence 141, Applemence 1989, Applemence 1989, Applemence 295, Applemence 295
                                                                                                                                                                                                                                                                                                                                                         Sequence 863, P
Sequence 1271,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 10, Apsequence 421, Apsequence 627,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 501,
                                                                                                                                                                                                                                                                                                                                 Sequence 429,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 377,
Sequence 377,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 41,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 27
Sequence 1,
Sequence 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1
Sequence 3
Sequence 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 4
Sequence 4
Sequence 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 4
Sequence 1
Sequence 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                          Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                 Ω
                                                                                                                                                        110
110
114
117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10
17
9
9
                       8
                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1525
22324
1079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   313
38692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        584
  Query
Match
                                                                                                 1000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
11000.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            762
762
638.5
635
635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          635
537.5
463.5
458
352.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         257.5
257.5
243
232.5
230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Command line parameters:
-MODEL=frame+ p2n.model -DEV=xlh
-Q=/Cqn2 1/USPTO spool h/USr0613105/runat_22102004_170442_18724/app_query.fasta_1.327
-Q=/Cqn2 1/USPTO spool h/USr0613105/runat_D=-SUFFIX=rnpb -MINMATCH=0.1
-DB=Published Applications NA -QFWT=fastap -SUFFIX=rnpb -MINMATCH=0.1
-LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum6.2
-TRANS=human40.cdi -LIST=100 -DOCALIGN=200 -THR SCORE=pct -THR MAX=100
-THR MN=0 -ALIGN+45 -NODEL=LOCAL -OUTPPT=pto -NORM=ext -HEARSIZE=s00 -MINLEN=0
-MAXLEN=200000000 -USER=US10613105_@CGN _1 1 480 @runat_2102004 _170442_18724
-NCPU=6 -ICPU=3 -NO MMAP -LARGEQUERY -NEG SCORES=0 -WAIT -DSPBLOCK=100
-NCPU=6 -ICPU=3 -NO MMAP -LARGEQUERY -NEG SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DBY TIMEOUT=120 -WARN TIMEOUT=30 -THRRADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                        ; Search time 427 Seconds (without alignments) 1583.976 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                              ......RDLKCCMGMCGKSCVSPVKA 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Published Applications NA:*

1: /cgn2_6/ptodata/2/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/2/pubpna/PCT_REW_PUBL.seq:*
3: /cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*
4: /cgn2_6/ptodata/2/pubpna/US06_PUBCOMB.seq:*
5: /cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
6: /cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*
7: /cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*
8: /cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*
9: /cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*
10: /cgn2_6/ptodata/2/pubpna/US09_NEW_PUB.seq:*
11: /cgn2_6/ptodata/2/pubpna/US09_NEW_PUB.seq:*
12: /cgn2_6/ptodata/2/pubpna/US09_NEW_PUB.seq:*
13: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
14: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
15: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
16: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
17: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
18: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
19: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
19: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
19: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
19: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
19: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
10: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
11: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
12: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
13: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
14: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
15: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
16: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
17: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
18: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
18: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6814466
                          GenCore version 5.1.6
(c) 1993 - 2004 Compugen Ltd.
                                                                                                                           nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3407233 seqs, 2561960514 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries
                                                                                                                                                                           October 24, 2004, 04:00:14
                                                                                                                                                                                                                                                                                                                                                                                                           0.5
7.0
7.0
                                                                                                                                                                                                                                                                                                         762
1 MKSSGLFPFLVLLALGTLAP.
                                                                                                                                                                                                                                                                                                                                                                                                           Xgapext
Ygapext
Fgapext
Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           length: 0
length: 2000000000
                                                                                                                                                                                                                                                                            US-10-613-105-2
                                                                                                                                                                                                                                                                                                                                                                                BLOSUM62
Xgapop 10.0 , X
Ygapop 10.0 , Y
Fgapop 6.0 , F
                                                  Copyright
```

Minimum DB seq Maximum DB seq

Database

Total number

Searched:

score:

Title: Perfect sc Sequence:

protein

Run on: ĕ

Scoring table:

0	RESULT 2 US-10-172-118-864 I Sequence 864, Application US/10172118 Sequence 864, Application No. US20030224374A1 Sequence 864, Application No. US20030224374A1 Septence 864, Application No. US20030224374A1 Septence No. US20030224374A1 Septence No. US2003024374A1 Septence No. US2003024374A1 Septence No.	Alignment Scores: Pred. No.: Score: Score: 762.00 Matches: 132 Score: Percent Similarity: 100.00\$ Mismatches: 0 Best Local Similarity: 100.00\$ Mismatches: 0 Ouery Match: 15 Ouery Match: 15 Ouery Match: 15 Ouery Match: 15 Ouery Match: 16 Ouery Match: 17 Ouery Match: 18 Ouery Match: 19 Ouery Match: 100.00\$ Mismatches: 0 Ouery Milling
Sequence 61, Appl Sequence 1975, Ap Sequence 1975, Ap Sequence 214, App Sequence 214, App Sequence 499, App Sequence 1242, Ap Sequence 1242, Ap Sequence 1242, Ap Sequence 1243, Ap Sequence 1333, Ap Sequence 1333, Ap Sequence 119, Appl Sequence 1126, Ap		399 132 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
584 16 US-10-173-999-61 239 16 US-10-085-783A-1975 239 16 US-10-085-783A-1975 583 14 US-09-96-768A-214 583 15 US-09-96-768A-214 583 15 US-10-23-150-8 583 15 US-10-177-293-49 583 15 US-10-177-293-49 583 16 US-09-971-429-55 580 10 US-09-77-887-1242 652 10 US-09-71-828-55 580 10 US-09-71-828-55 580 10 US-09-71-828-55 581 15 US-10-17-203-315 778 15 US-10-157-031-119 78 15 US-10-155-745-113 78 15 US-10-99-56-1393 78 16 US-10-95-4456-1126 78 10 US-10-95-4456-1129	762 9 US-09-989-722-344 762 9 US-09-989-723-344 762 9 US-09-989-723-344 762 9 US-09-989-727-344 762 9 US-09-989-732-344 762 9 US-09-989-723-344 762 9	Homo sapiens
71 163 21.4 72 161 21.1 74 161 21.1 75 161 21.1 76 161 21.1 77 161 21.1 78 161 161 161 161 161 161 161 161 161 16	146.5 19 146	; SEQ ID NO 53 ; TYPE: DNA ; ORGANISM: Homo sapiens US-10-257-021-53 Alignment Scores: Percent Similarity: 10 Best Local Similarity: 10 Ouery Match: 110 DB: US-10-613-105-2 (1-132) x QY I MetLysSerSer OY I ATGAAGTCCAGC

셤

ઠે

g

ò

g ò a

8

```
APPLICANT: Smatcheon, Gleenda
APPLICANT: Santheon, Gleenda
APPLICANT: Santheon, Gleenda
APPLICANT: Statiling, Gary
APPLICANT: Statiling, Gary
APPLICANT: Taupier, Raymond J.
APPLICANT: Taupier, Raymond J.
APPLICANT: Toong, Haihong
APPLICANT: Zhong, Haihong
APPLICANT: Zhong, Mai
TITLE OF INVERTION: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME, AND METHODS
TITLE OF INVERTION: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME, AND METHODS
TITLE OF TAILOR DATE: 2001-12-02
PRIOR APPLICATION NUMBER: 60/336,600
PRIOR PELING DATE: 2001-12-05
PRIOR PELING DATE: 2001-12-05
PRIOR PELING DATE: 2001-12-12
PRIOR PELING DATE: 2001-12-17
PRIOR APPLICATION NUMBER: 60/341,477
PRIOR APPLICATION NUMBER: 60/344,903
PRIOR PELING DATE: 2001-12-17
PRIOR PELING DATE: 2001-12-27
PRIOR PELING DATE: 2001-12-27
PRIOR PELING DATE: 2001-12-37
PRIOR APPLICATION NUMBER: 60/344,903
PRIOR PELING DATE: 2001-12-37
PRIOR APPLICATION NUMBER: 60/343,289
PRIOR PILING DATE: 2002-04-17
PRIOR APPLICATION NUMBER: 60/343,289
PRIOR PILING DATE: 2002-05-15
                                                                                    241 ccaacaaggaaggccrgggaagrgcccagrgacrrarggccaargrrrgargcrraac 300
                                                                                                                                                                                                                  301 ccccccarrrcrereaearecareccaereccasecereacrreaererrecarece 360
                                                                                                                                                                                                                                                                                      121 MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                           Sequence 141, Application US/10309290; Publication No. US20040023241A1; GENERAL INFORMATION:
APPLICANT: Alsobrook II, John P. APPLICANT: Boldog, Ferenc L.
APPLICANT: Burgess, Catherine E.
APPLICANT: Chillakuru, Rajeev A.
APPLICANT: Edinger, Shlomit R.; APPLICANT: Gerlach, Valerie L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     œ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gorman, Linda
Gould-Rothberg, Bonnie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 274
SOFTWARE: CuraSeqList version 0.1
SEQ ID NO 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Guo, Xiaojia
Jeffers, Michael E.
Ji, Weizhen
Li, Li Malyankar, Uriel M.
Miller, Charles E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Murphey, Ryan
Patturajan, Meera
Peyman, John A.
Rastelli, Luca
Rieger, Daniel K.
Shenoy, Suresh G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-309-290-141
                                                                                                                                                            101
                                                                                                                                                                                                                                                                                                                                                          361
                              81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                            ò
                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                      à
                                                             241 CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC 300
                                                                                                                                                                                                                                                                                                                                                                 CCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                           ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
121 GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 Argaagrecagedecretrecerrecreseserserrecersesaacrereseace 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: NODELS, CHILBUDNEL, APPLICANT: Van (* Vert, Laura Johanna APPLICANT: Van (* Vijver, Marc J. APPLICANT: Van de Vijver, Marc J. APPLICANT: Van de Vijver, Marc J. APPLICANT: Bernards, Rene TILE CPT INVENTION: Diagnosis and Prognosis of Breast Cancer Patients FILE REFERENCE: 9301-188-999 CURRENT APPLICATION NUMBER: US/10/342,887 CURRENT APPLICATION NUMBER: 60/380,710 PRIOR FILING DATE: 2001-06-18 PRIOR FILING DATE: 2001-06-18 PRIOR FILING DATE: 2002-05-14 PRIOR FILING DATE: 2002-05-14 PRIOR FILING DATE: 2002-06-14 PRIOR P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MetLysSerSerGlyLeuPheProPheLeuValLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               333
000
000
                                                                                                                                                                                                                                                                                                                                                                                                                                                     MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361 Argreregaaarcerecerreceerereaaacer 396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-613-105-2 (1-132) x US-10-342-887-864 (1-399)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 3
US-10-342-887-864
; Sequence 864, Application US/10342887
; Publication No. US20040058340A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Dai, Hongyue
APPLICANT: He, Yudong
APPLICANT: Linsley, Peter S.
APPLICANT: Mao, Mao
APPLICANT: Roberts, Christopher J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2.21e-82
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-342-887-864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                          81
                                                                                                                                                                                                                                                                                                                           101
                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No.:
```

ò 요 ð 요 ઠે g

```
Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-613-105-2 (1-132) x US-09-964-824A-582 (1-594)
                                                                                                  US-10-613-105-2 (1-132) x US-10-360-368-1 (1-565)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps:
           3.35e-82
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.55e-82
762.00
100.00%
100.00%
                                  Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 6
US-09-964-824A-582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JS-09-964-824A-582
Alignment Scores
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores
Pred. No.:
                                                                                                                           Н
                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match:
                                                                                                                           à
                                                                                                                                               유
                                                                                                                                                                           ò
                                                                                                                                                                                             g
                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                 ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                             75 TGGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTGTCTTGTCTT 134
                                                                                                                                                                                                                                                                                                                                                                                                         254
                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAAC 314
                                                                                                                                                                                                                                                                                                                                              GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCCAGGGAAG 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ccccccaarrrcrereagarceareccaereccaecerecceereacrreagererecarecec 374
                                                                                                                                                                                                                               20
                                                                                                                                                                                                                                                                                40
                                                                                                                                                                                                                                                                                                                               41 AlaGinCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys 60
                                                                                                                                                                                                                                                                                                                                                                            74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1, Application US/10360368
| Publication No. US20030220281A1
| GENERAL INFORMATION:
| APPLICANT: Nielson, Lorna I
| APPLICANT: Zhen, Li
| TITLE OF INVENTION: Treatment Of Endometriosis With Antileukoprotease
| TITLE OF INVENTION: Treatment Of Endometriosis With Antileukoprotease
| TITLE OF INVENTION: Treatment Of Endometriosis With Antileukoprotease
| TITLE OF INVENTION: Treatment Of Endometriosis With Antileukoprotease
| TITLE OF INVENTION: UNMBER: US/10/360,368
| CURRENT APPLICATION NUMBER: 05/056,134
| PRIOR FILING DATE: 2000-06-27
| PRIOR FILING DATE: 1999-07-01
| NUMBER OF SEQ ID NOS: 2
| SOFTWARE: Patentin Version 3.1
| SEQ ID NO 1
                                                                                                                                                                                                                             TrpAlaValGluGlySerGlyLyBSerPheLysAlaGlyValCyBroProLyBLyBSer
                                                                                                             422
132
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                    US-10-613-105-2 (1-132) x US-10-309-290-141 (1-422)
                                                                                                              2.36e-82
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
              TYPE: DNA
ORGANISM: Homo sapiens
                                               , NAME/KEY: CDS
; LOCATION: (15)..(410)
US-10-309-290-141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; NAME/KEY: CDS
; LOCATION: (59)..(457)
; OTHER INFORMATION:
US-10-360-368-1
                                                                                                                                       Percent Similarity:
Best Local Similarity:
                                                                                                  Alignment Scores:
Pred. No.:
 LENGTH: 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-360-368-1
                                                                                                                                                                                                                                                                               21
                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                        135
                                                                                                                                                                                                                                                                                                                                                                                                                                  81
                                                                                                                                                                                                                                                                                                                                                                                                                                                          255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            315
                                      FEATURE:
                                                                                                                                                                Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                              6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
```

```
Sequence 582, Application US/09964824A

Sequence 582, Application US/09964824A

Sequence 582, Application US/09964824A

Sequence 582, Application US/09964824A

GENERAL INFORMATION:
TITLE OF INVENTION: Stephen

TITLE OF INVENTION: Sets

FILE REPERENCE: 68290-73

CURRENT APPLICATION NUMBER: US/60/236,032

PRIOR FILING DATE: 2000-09-28

PRIOR PILING DATE: 2000-09-28

PRIOR FILING DATE: 2000-09-28

PRIOR FILING DATE: 2000-09-28

NUMBER OF SEQ ID NOS: 583

SOFTWARE: Patentin version 3.0

SEQ ID NO 582

LENGTH: 594
                                                                                                                                                                                                                                                                                                                                                                                                                                                            178
                                                                                                                                                                                                                                                                                                                                                      238
                                                                                                                                                                                                                                                                                                                                                                                                                           298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      101 ProbroAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysWetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           418
                                                                                                                                                                                                    59 ATGAAGTCCAGCGCCTCTTCCCCTTCCTGGTGCTTGCCCTAGGAACTCTGGCACT 118
                                                                                                                                                                                                                                        40
                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                        90
                                                                                                                                                                                                                                                                                                               239 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC
                                                                                                                                                                                                                                                             61 LysargcysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                   MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                        359 ccccccarricrereagaregaregeccagrecaageereacricaagrerrecaresec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        594
0 0 0 0 0 0 0
MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  419 Argigiggaaarccigcgrirccccrgigaaacr 454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
```

٦.

Gaps: 0 Gaps	Oy 61 LygArgCygCygCygCygCygCygLylleLygCygLeuAapproValAspThrProAsn 80	SULT 8 37 SULT 8 690-865-81 690-865-81 690-865-81 690-865-81 800-8	9 IGGGCIGIGGARGCCICIGGARAGICCIIICARAGCIGGAGIIGICCICCICAGARAGCATA A A A A A A A A A A A A A A A A A A
MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro	Qy 81 ProThrArgargLy8ProGlyLy8Cy8ProValThrTyrGlyGlnCy8LeuMetLeuAsn 100 Db 259 CCAACAGGGAGGCCTGGGACTTATGGCCATTAATG Qy 101 ProDroAsnPheCyGluMetAspGlyGlnCy8Ly8ArgAspLeuLy8Cy8MetGly 120 Db 319 CCCCCCAATTTCTGGAGATGGATGGCCAGTGCAAGGGTGATTGAAGTTGCATGGGC 378 Qy 121 MetCy8GlyLy8SerCy8ValSerProValLy8Ala 132 Db 379 ATGTGGGAAATCCTGGGTTTCCCCTGTGAAAGCT 414	Sequence 1989, Application US/09954456 Sequence 1989, Application US/09954456 Sequence 1989, Application US/09954456 GENERAL INFORMATION: APPLICANT: Young, Paul TITLE OF INVENTION: Percess for Identifying Anti-CaTITLE OF INVENTION: Sets FILE REFERENCE: 689290-76 CURRENT APPLICATION NUMBER: US/09/954,456 CURRENT APPLICATION NUMBER: US/00/234,052 PRIOR PILING DATE: 2000-09-18 PRIOR PILING DATE: 2000-09-25 PRIOR PILING DATE: 2000-09-27 PRIOR PILING DATE:	Score: 7.62.00 Macches: 132 Percent Similarity: 100.00% Ornservative: 0 Best Local Similarity: 100.00% Mismatches: 0 Query Match: 100.00% Indels: 0

```
Sequence 374, Application US/10205823
| Publication No. US203010896341
| GENERAL INFORMATION:
| APPLICANT: Schlegel, Robert |
| APPLICANT: Moraban, John E. |
| APPLICANT: Moraban, John E. |
| APPLICANT: Generavarapu, Manjula |
| APPLICANT: Moraban, John E. |
| APPLICANT: Anderson, Dustin |
| APPLICANT: Anderson, Dustin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81 ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           101 ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                               138
                                                                                                                                                                                                                                                                                                                                                                                                                                                          198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                378
                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            80
                                                                                                                                                                        78
                                                                                                                                                                                                                                             40
                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                                                 41 AlaGinCysLeuArgTyrLysLysProGluCysGlnSsrAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                         61 LysArgCysCysProAspThrCysGly11eLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MetLygSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                           19 ATGAAGTCCAGCGGCCTCTTCCCCTTCCTGGTGCTGCTTGCCCTGGGAACTCTGGCACT
                                                                                                                                                                                                                                             21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProLysLysSer
                                                                                                                                                                                                                                                                                                               79 resecretesaasecreresaaasrecricaaaseresaasrererererereraasaarer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    319 CCCCCCAATTTCTGTGAGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121 MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            379 Argiciciosa Anticios de la Anticio de la Anticio de Anticio de
                                US-10-613-105-2 (1-132) x US-10-097-340-295 (1-594)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.55e-82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 10
US-10-205-823-374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-205-823-374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
Pred. No.:
                                                                                                      -
                                                                                                          ઠ
                                                                                                                                                                    용
                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Xumei ZHAO
APPLICANT: Karen GLADA
APPLICANT: Karen GLADA
TITLE OF INVENTION: Nucleic Acid Molecules and Proteins For The Identification,
TITLE OF INVENTION: Assessment, Prevention, and Therapy of Ovarian Cancer
FILE REFERENCE: MRI-09.
CURRENT APPLICATION NUMBER: US/10/097,340
CURRENT FILING DATE: 2002-03-14
                                                                                                                                                                                                            ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                           259 CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC 318
                                                                                                                                                                                                                                                                                                                                                       ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                         319 ccccccarrrcrgrgagarggarggccagrgccagcgrgacrrgaagrgrrgcargggc 378
139 GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG 198
                                                                                                                                       199 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCCAAAC 258
                                                                 LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      594
000
000
000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 379 ArgrerecaAArccrecerrrececrereAAAGCT 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 363
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 295
LENGTH: 594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT FILING DATE: 2002-03-14
PRIOR APPLICATION NUMBER: 60/276,025
PRIOR PILING DATE: 2001-03-14
PRIOR APPLICATION NUMBER: 60/276,025
PRIOR FILING DATE: 2001-09-26
PRIOR FILING DATE: 2001-09-26
PRIOR FILING DATE: 2001-03-14
PRIOR PILING DATE: 2001/09/26
PRIOR PILING DATE: 2001-08-10
PRIOR FILING DATE: 2001-08-10
PRIOR FILING DATE: 2001-09-26
PRIOR FILING DATE: 2001-09-26
PRIOR FILING DATE: 2001-09-26
PRIOR FILING DATE: 2001-09-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 9
US-10-097-340-295
; Sequence 295, Application US/10097340
; Publication No. US20030087250A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: John MONAHAN
APPLICANT: John MONAHAN
APPLICANT: Sebastian HOERSCH
APPLICANT: Shubhangi KAMATKAR
APPLICANT: Steve G. KOVATS
APPLICANT: Rachel B. MEYERS
APPLICANT: Rachel B. MEYERS
APPLICANT: Mechael MORRISEY
APPLICANT: Peter OLANDT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gordon B. MILLS
Robert C. BAST, Jr.
Karen LU
Rosemarie SCHMANDT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.55e-82
762.00
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Peter VEIBY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CRGANISM: Homo sapiens US-10-097-340-295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ami SEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                 61
                                                                                                                                                                                                            81
                                                                                                                                                                                                                                                                                                                                                       101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                       셤
                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
셤
                                                                 ò
                                                                                                                                                                                                            8
```

셤

ò g ò 셤

8

g

ð

ò g a

ò

ò

```
81 ProfikargargiysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       259 CCAACAAGGAGGAAGCCTGGGAAGTGCCCACTGATTTTTTGATGTTTAAC 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     79 TGGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCT 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               199 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LysargCysCysProAspThrCysGly1leLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19 ATGAAGTCCAGCGGCCTCTTCCCCTTCCTGGTGCTGCCTTGCCCTGGGAACTCTGGCACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Breast Cancer Patients
                                                                                                                                                                                                                                                                                    594
132
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121 MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      379 ArgrereseaAArcerecerricecerereAAGer 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 863, Application US/10172118
| Sequence 863, Application US/10172118
| Publication No. US20030224374A1
| GENERAL INFORMATION:
| APPLICANT: Dai, Hongyue
| APPLICANT: Linsley, Peter
| APPLICANT: Mao, Mao
| APPLICANT: Roberts, Chris
| APPLICANT: Roberts, Chris
| APPLICANT: Bernards, Rene
| APPLICANT: Van de Vijver, Marc
| APPLICANT: Darm: Bernards, Rene
| APPLICANT: Darm: 175-999
| CURRENT APPLICANTION: Diagnosis of Brei
| FILE REFERENCE: 3301-175-999
| CURRENT FILING DATE: 2002-06-14
| PRIOR APPLICANTION NUMBER: 60/380,770
| PRIOR FILING DATE: 2002-05-14
| WUNDBER CO SEQ ID NOS: 2699
| LENGTH: S94
                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-613-105-2 (1-132) x US-10-177-293-429 (1-594)
PRIOR FILING DATE: 2002-03-05
PRIOR APPLICATION NUMBER: US 60/xxx,xxx
PRIOR FILING DATE: 2002-05-14
NUMBER OF SEQ ID NOS: 506
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 429
LENGTH: 594
                                                                                                                                                                                                                                                                               3.55e-82
762.00
100.00$
100.00$
                                                                                                                                                                  TYPE: DNA
ORGANISM: Homo sapiens
US-10-177-293-429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                            Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Gannavarpu, Manjula
APPLICANT: Gannavarpu, Manjula
APPLICANT: Gannavarpu, Manjula
APPLICANT: Gannavarpu, Manjula
APPLICANT: Kanatkar, Shubhangi
APPLICANT: Maren, Mauren
APPLICANT: Meren, Mauren
APPLICANT: W., Yongyao
APPLICANT: Wondhan, John
APPLICANT: Meyers, Rachel E.
APPLICANT: Mere E.
APPLICANT: Mills, Gardon B.
TITLE OF INVENTION: PREVENTION, AND THERAPY OF BREAST CANCER
FILE REFERENCE: MRI-038
APPLICANT: MILLS, Gardon B.
TITLE OF INVENTION NUMBER: US 60/239,887
FRIOR PLILING DATE: 2001-06-27
FRIOR APPLICATION NUMBER: US 60/306,501
FRIOR FILING DATE: 2001-07-18
FRIOR FILING DATE: 2001-07-18
FRIOR FILING DATE: 2001-07-18
FRIOR FILING DATE: 2001-07-25
FRIOR FILING DATE: 2001-07-25
FRIOR APPLICATION NUMBER: US 60/362,585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAAC 318
                                                                                                                                                                                                                                                                                                                                                                                                                 139 GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCCAGGAAG 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCCCCCAATTTCTGTGAGATGGATGCCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 378
                                                                                                                                                                                                                                                                                                                                      79 resecreresaasecreresaaasreerreaaaseresasrererereereeraaaarer 138
                                                                                                                                                                                                                                                                                            40
                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                             20
                                                                                                                                                                                                                                            ATGAAGTCCAGCGCCTCTTCCCTGGTGCTGCTTGCCCTGGGAACTCTGGCACCT 78
                                                                                                                                                                                                                                                                                                                                                                                      41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LysArgCysCysProAspThrCysG1y11eLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                             MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                            TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer
  132
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGTGTGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 414
                        Conservative:
Mismatches:
Indels:
                                                                                                                                              US-10-613-105-2 (1-132) x US-10-205-823-374 (1-594)
    Matches:
                                                                                                   Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; Sequence 429, Application US/10177293; Publication No. US20030124128A1; GENERAL INFORMATION:
  762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Lillie, James
APPLICANT: Glatt, Karen
APPLICANT: Zhao, Xumei
                   Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 11
US-10-177-293-429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               319
                                                                                                                                                                                                                                            19
                                                                                                                                                                                                                                                                                            21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
```

```
APPLICANT: Shenoy, Suresh G.
APPLICANT: Shenoy, Suresh G.
APPLICANT: Shenoy, Suresh G.
APPLICANT: Starthson, Glennda
APPLICANT: Starthson, Glennda
APPLICANT: Taupier, Raymond J.
APPLICANT: Taupier, Raymond J.
APPLICANT: Taupier, Raymond J.
APPLICANT: Zhong, Haihong
APPLICANT: Zhong, Haihong
APPLICANT: Zhong, Haihong
APPLICANT: Chory, Mel
TITLE OF INVENTION: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME, AND METHODE
FILE REFERENCE: 21402-502A
CURRENT APPLICATION NUMBER: 06/336,600
PRIOR APPLICATION NUMBER: 60/336,600
PRIOR APPLICATION NUMBER: 60/336,600
PRIOR PRILING DATE: 2001-12-05
PRIOR FILING DATE: 2001-12-05
PRIOR FILING DATE: 2001-12-12
                                                                                                                                                                                     258
                                                                                                                                                                                                                                                                                                                      ProThrargarglyBroGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                       101 ProbroAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                        378
                                                                                                                                                    79 resecreresaassercresaaasrecrreaaascresasrerererecreeraaaaarer 138
                                                                                   78
                                                                                                                      40
                                                                                                                                                                                                                                                        80
                                                                                                                                                                                                                                                    CCAACAAGGAAGGACTGGGAAGTGCCCAAGTGACTTATGGCCAATGTTTGATGCTTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                319 CCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC
                                                    MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                     19 Argaagrecagegeererrecerrecressesergerrecerreseaacrereseace
                                                                                                                     21 TrpAlaValGlyGerGlyLy8SerPheLy8AlaGlyValCy8ProProLy8Ly8Ser
                                                                                                                                                                                                                                                                                                                                                                                                                                                         MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGTGTGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 414
                    JS-10-613-105-2 (1-132) x US-10-305-720-1271 (1-594)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 143, Application US/10309290; Publication NO. US20040023241A1; GENERAL INFORMATION: APPLICANT: Alsobrook II, John P. APPLICANT: Anderson, David W. APPLICANT: Boldog, Perenc L. APPLICANT: Burgess, Catherine E. APPLICANT: Chillakuru, Rajeev A. APPLICANT: Gelinger, Shlomit R. APPLICANT: Gerlach, Valerie L. APPLICANT: Gorman, Linda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gould-Rothberg, Bonnie E.
Guo, Xiaojia
Jeffers, Michael E.
Ji, Weizhen
Li, Li
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Malyankar, Uriel M.
Miller, Charles E.
Murphey, Ryan
Patturajan, Meera
Peyman, John A.
Rastelli, Luca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 14
US-10-309-290-143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                      н
                                                                                                                                                                                                                                                                                                                          81
                                                                                                                                                                                                                                                                                                                                                         259
                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                    ठ
                                                                                셤
                                                                                                                      ò
                                                                                                                                               ద
                                                                                                                                                                                       ò
                                                                                                                                                                                                                   염
                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1271, Application US/10305720

Sequence 1271, Application US/10305720

Publication No. US20040010136A1

GENERAL INFORMATION:

APPLICANT AL-YOUNG, Janice K.; Seilhamer, Jeffrey J.

TITLE OF INVENTION: Composition for the Detection of Signaling Pathway Gene Expressic TITLE OF INVENTION Composition for the Detection of Signaling Pathway Gene Expressic TITLE OF INVENTION NUMBER: US/10/305,720

CURRENT APPLICATION NUMBER: US/10/305,720

CURRENT APPLICATION NUMBER: US/10/306,434

PRIOR FILING DATE: 1998-01-30

NUMBER OF SEQ ID NOS: 1490

SOFTWARE: PERL PROGRAM

SEQ ID NO 1271

LENGTH: 594
                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTACAAAAATCT 138
                                                                                                                                                                                                                                                                                                                                                                                                                GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ProThrArgArgLysBroGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cccccaarrrcrereadaredaredccaerecaaccereacrreaagrerrecaredec 378
                                                                                                                                                                                                                                                        40
                                                                                                                                                                                                                                                                                                                                                                                         41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys 60
                                                                                                                                                                                                                                                                                                                          TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: misc feature
; OTHER INFORMATION: GenBank ID No. US20040010136A1 g28638
US-10-305-720-1271
                                                                                                   594
132
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                379 ATGTGTGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                        US-10-613-105-2 (1-132) x US-10-172-118-863 (1-594)
                                                                                                                                                                                         Gaps:
PUBLICATION INFORMATION:
DATABASE ACCESSION NUMBER: NM 003064
DATABASE ENTRY DATE: 2001-06-18
                                                                                                   3.55e-82
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.55e-82
762.00
100.00%
100.00%
16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-305-720-1271
                                                    US-10-172-118-863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
Pred. No.:
                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                         19
                                                                                                                                                                                                                                                                                                                          21
                                                                                                                                                                                                                                                                                                                                                                                                                          139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              319
                                                                                                                                                                                                                                                                                                                                                         79
                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                     Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                        Pred. No.:
                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
```

```
139 GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101 ProbroAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    199 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         319 CCCCCCAATTTCTGTGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 378
APPLICAT: Scherf, Uwe APPLICAT: Scherf, Uwe APPLICAT: VocKley, Joseph G.
TITLE OF INVENTION: Gene Expression Profiles in Esophageal Tissue FILE REFERENCE: 44921-5026
CURRENT PILING DATE: 2002-09-30
CURRENT FILING DATE: 2002-09-30
PRIOR PELICATION NUMBER: PCT/USO1/09847
PRIOR PELICATION NUMBER: OF 000-09-31
PRIOR FILING DATE: 2001-03-28
PRIOR FILING DATE: 2000-03-31
NUMBER OF SEQ ID NOS: 1588
SEQ ID NO 1529
LENGTH: 594
TYPE: NO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysErs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 LyshrgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 863, Application US/10342887
Publication No. US20040058340A1
GENERAL INFORMATION:
APPLICANT: Use, Yudong
APPLICANT: He, Yudong
APPLICANT: Mao, Peter S.
APPLICANT: Roberts, Christopher J.
APPLICANT: No 't Veer, Laura Johanna
APPLICANT: Van 't Veer, Laura Johanna
APPLICANT: Wan 'd Vijver, Marc J.
APPLICANT: Bernards, Rene
TITLE OF INVENTION: Diagnosis and Prognosis of Breast Cancer Patients
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE: OTHER INFORMATION: Genbank Accession No. US20040033502A1 X04470 US-10-240-425-1529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121 MetCyBGlyLyBSerCyBValSerProValLyBAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                379 Argricioscadarcerecerricecereredadeer 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-613-105-2 (1-132) x US-10-240-425-1529 (1-594)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.55e-82
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-342-887-863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          259 CCAACAAGAGGAGGAAGCCTGGGGAAGTGCCCCAGTGACTTATGGCCAATGTTTGATGCTTAAAC 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ProThrArgArgLy8ProGlyLy8Cy8ProValThrTyrGlyGlnCy8LeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           139 GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LysargCysCysProaspThrCysGly1leLysCysLeuaspProValaspThrProasn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19 Argaagrecagegeererrecerrecregrecrecrecerecereseaacreregeacer
                                                                                                                                                                                                                                                                                                                                                                                                                                                               - See File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        594
0
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-613-105-2 (1-132) x US-10-309-290-143 (1-594)
                                                                                 PRIOR APPLICATION NUMBER: 60/341,477
PRIOR FILING DATE: 2001-12-17
PRIOR FILING DATE: 2001-12-17
PRIOR FILING DATE: 2001-12-17
PRIOR FILING DATE: 2001-12-27
PRIOR FILING DATE: 2001-12-20
PRIOR PILING DATE: 2001-12-27
PRIOR PELICATION NUMBER: 60/344,297
PRIOR PELICATION NUMBER: 60/344,903
PRIOR PILING DATE: 2001-12-27
PRIOR APPLICATION NUMBER: 60/344,903
PRIOR PILING DATE: 2001-12-31
PRIOR PILING DATE: 2002-04-17
PRIOR PILING DATE: 2002-04-17
PRIOR FILING DATE: 2002-05-15
PRIOR FILING DATE: 2002-05-15
PRIOR FILING DATE: 2002-05-15
PRIOR PILING DATE: 2002-05-15
PRIOR FILING DATE: 2002-05-15
PRIOR PILING DATE: 2003-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1529, Application US/10240425; Publication No. US20040033502A1; GENERAL INFORMATION: APPLICANT: Williams, Amanda APPLICANT: Boland, Joseph F. APPLICANT: Lord, Reginald V. APPLICANT: Alvarez, Chris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.55e-82
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; NAME/KEY: CDS
; LOCATION: (19)..(414)
US-10-309-290-143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 15
US-10-240-425-1529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score:
```

ద

ઠે

g

ઠ

원

쉱 Š 원 ò

ઠે

ò

a

Š

138

9

80

594 0 0 0 0

Length: Matches: Conservative: Mismatches: Indels:

```
3.55e-82
762.00
100.00%
100.00%
                                                                 3.55e-82
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
CORGANISM: Homo sapiens
US-10-322-696-125
                   sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                             Percent Similarity:
Best Local Similarity:
Query Match:
                 Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
Pred. No.:
                                                         Alignment Scores:
Pred. No.:
                                US-10-613-105-1
                                                                                                                                                                                                                                                                                                                                                                            61
    ; TYPE: DNA ; ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                           요
                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ProThrargarglysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                199 AAGAGATGTTGTCCTGACACTTGTGGCATCAATGCCTGGATCCTGTTGACACCCCAAAC 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                      79 TGGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCT 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            80
                                                                                                                                                                                                                                                                                                                                                                                                                                   21 TrpAlaValGluGlySerGlyLyBSerPheLyBAlaGlyValCyBProProLyBLyBSer 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                       78
                                                                                                                                                                                                                                                                                                                                                                                            19 ATGAAGTCCAGCGCCTCTTCCCCTTCCTGGTGCTTGCCTTGCCCTGGGAACTCTGGCACCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-613-105-1

| Sequence 1, Application US/10613105 |
| Sequence 1, Application US/2004011569041 |
| Sequence 1, Application No. US2004011569041 |
| Publication No. US2004011569041 |
| GENERAL INFORMATION: Statement of Sequence |
| APPLICANT: Rastlin, Luca |
| APPLICANT: Rastlin, Luca |
| TITLE OF INVENTION: Method of Detecting inflammatory Lung Disorders |
| TITLE OF INVENTION: WENDER: US/10/613,105 |
| CURRENT FILING DATE: 2003-07-02 |
| PRIOR APPLICATION NUMBER: 09/865,812 |
| PRIOR APPLICATION NUMBER: 09/865,812 |
| PRIOR APPLICATION NUMBER: 09/865,812 |
| PRIOR FILING DATE: 2001-05-25 |
| NUMBER OF SEQ ID NOS: 5 |
| SEQ ID NO 1 |
| SEQ ID NO 1 |
                                                                                                                                                                                                                                                                                                                                                                              MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                594
0 0 0 0 0 0 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGTGTGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 414
                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                 US-10-613-105-2 (1-132) x US-10-342-887-863 (1-594)
FILE REFERENCE: 9301-188-999
CURRENT APPLICATION NUMBER: US/10/342,887
CURRENT FILING DATE: 2003-01-15
PRIOR APPLICATION NUMBER: 60/298,918
PRIOR APPLICATION NUMBER: 60/380,710
PRIOR FILING DATE: 2001-06-18
PRIOR FILING DATE: 2002-05-14
PRIOR FILING DATE: 2002-05-14
PRIOR PILING DATE: 2002-06-14
NUMBER OF SEQ ID NOS: 2699
SEQ ID NO 863
LENGTH: 594
                                                                                                                                                                                                                                                                                                                        Gaps:
                                                                                                                                                                                                                                           3.55e-82
762.00
100.00%
100.00%
                                                                                                                                                                                       ) ORGANISM: Homo sapiens
US-10-342-887-863
                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                  Alignment Scores:
Pred. No.:
Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      379
                                                                                                                                                                             TYPE: DNA
                                                                                                                                                                                                                                                                                                         Query Match
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              요
                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                               ઠે
```

```
81 ProThrargArgLysProG]yLysCysProValThrTyrG]yGlnCysLeuMsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                  101 ProproAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysWetGly 120
                                                                                                                                   259 CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAAG 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                         119 CCCCCCCAATTICTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
                                                                        78
                                                                                                               40
                                                                                                                                                                                                                                                                         80
                                                                                                                                                                                                                                                                         LygArgCysCysProAspThrCysGly1leLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                 21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysEvsSer
                                                         19 ATGAAGTCCAGCGGCCTCTTCCCCTTGCTGCTGCTTGCCCTGGGAACTCTGGCACCT
                                   1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-312-696-125

10S-10-312-696-125

Sequence 125, Application US/10322696

Publication No. US20040166490A1

GENERAL INFORMATION:
APPLICANT: Marandro, Marc
TILLE OF INVENTION: NOVEL THERAPEUTIC TARGETS IN CANCER
FILE REFERENCE: 529452001200

CURRENT APPLICANTON NUMBER: US/10/322,696

CURRENT FILING DATE: 2003-10-17

NUMBER OF SEQ ID NOS: 186

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 125

LENGTH: 594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              594
0000
0000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       379 ATGTGTGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-613-105-2 (1-132) x US-10-322-696-125 (1-594)
US-10-613-105-2 (1-132) x US-10-613-105-1 (1-594)
```

ઠે

```
WESULY 409

WESULY 13-999-153

WESULY 13-999-153

SEQUENCE 153, Application US/10173999

Publication No. US20040005563A1

GENERAL INFORMATION:

APPLICANT: Mack, David H.

APPLICANT: Gish, Kurt C.

TITLE OF INVENTION: Methods of Diagnosis of Ovarian Cancer, Compositions

TITLE OF INVENTION: Cancer

TITLE OF INVENTION: Cancer

TITLE REFERENCE: 018501-004420US

CURRENT APPLICATION NUMBER: US/10/173,999

CURRENT APPLICATION NUMBER: US 60/299,234

PRIOR FILING DATE: 2001-06-18

PRIOR PELING DATE: 2001-06-18

PRIOR PELING DATE: 2001-06-18

PRIOR PELING DATE: 2001-06-18

PRIOR FILING DATE: 2001-01-13

PRIOR PELING DATE: 2001-01-13

PRIOR PELING DATE: 2001-01-13

PRIOR PELING DATE: 2001-10-13

PRIOR PELING DATE: 2001-10-13

PRIOR PELING DATE: 2001-10-13

PRIOR FILING DATE: 2001-11-13

PRIOR PELING DATE: 2001-11-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     81 ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       101 ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   203 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCCAAAC 262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              83 resecreresaksecreresakastecrreakasecresaksrerestecreerakakakrer 142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LysArgCysCysProAspThrCysGly1leLysCysLeuAspProValAspThrProAsn 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               323 CCCCCCAATTTCTGTGAGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC
                                                                                                                                                                                                                                                                                                                                                                                                 1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23 Argaagrecagegecrerrecerrecresses acres established and a serving and a serving and a serving and a serving a serv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21 TrpAlaValGluGlySerGlyLvsSerPheLysAlaGlyValCysProProLysLysSer
                                                                  598
132
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121 MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      383 ArcregedaArccrecerricecerergaAger 418
                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                               US-10-613-105-2 (1-132) x US-10-177-293-431 (1-598)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.58e-82
762.00
100.00%
                                                                                                     762.00
100.00%
100.00%
                                                                                                                            Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA ORGANISM: Hômo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
Pred. No.:
                                   Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: FUSICAL, Majos
APPLICANT: Sahin, Aysegul
TITLE OF INVENTION: COMPOSITIONS, KITTS, AND METHODS FOR IDENTIFICATION, ASSESSMENT,
TITLE OF INVENTION: PREVENTION, AND THERAPY OF BREAST CANCER
FILE REFERENCE: MRI-038
FILE REFERENCE: MRI-038
CURRENT APPLICATION NUMBER: US 60/209,887
PRIOR FILING DATE: 2001-06-21
PRIOR PLING DATE: 2001-06-27
PRIOR PLING DATE: 2001-06-27
PRIOR PLING DATE: 2001-09-25
PRIOR PLING DATE: 2001-09-25
PRIOR PLING DATE: 2001-09-25
PRIOR PLING DATE: 2002-09-25
PRIOR PLING DATE: 2002-09-25
PRIOR FILING DATE: 2002-09-05
PRIOR FILING DATE: 2002-05-14
                                                                  TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer 40
                                                                                                                                                                                                                                                            GCCCAGTGCCTTAGATACAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCCAGGGAAG 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ProThrArgArgLyaProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCAACAAGGAGGAAGCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ProproAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCTGTTGACACCCCAAAC 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 378
                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                         LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn 80
19 ATGAAGTCCAGCGGCCTCTTCCCCTTCCTGGTGCTTGCCCTGGGAACTCTGGCACCT 78
                                                                                                                                                                                                                      41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ArcreredaAArccrecerrirecerereAAAGer 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 431, Application US/10177293
Publication No. US20030124128A1
GENERAL INFORMATION:
APPLICANT: Lillie, James
APPLICANT: Clatt, Karen
APPLICANT: Chao, Xumei
APPLICANT: Amarkar, Shubhangi
APPLICANT: Amarkar, Shubhangi
APPLICANT: Mertens, Maureen
APPLICANT: Mertens, Maureen
APPLICANT: Wang, Youzhen
APPLICANT: Wang, Youzhen
APPLICANT: Wang, Youzhen
APPLICANT: Wang, Shastian
APPLICANT: Monahan, John
APPLICANT: Monahan, John
APPLICANT: Meyers, Rachel E.
APPLICANT: Meyers, Rachel E.
APPLICANT: Baget Jr., Robert C.
APPLICANT: Pustcobagyi, Gabriel N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bast Jr., Robert C.
Hortobagyi, Gabriel N.
Pusztai, Lajos
Meric, Funda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
CRGANISM: Homo sapiens
US-10-177-293-431
                                                                                                                                                                                                                                                                                            139
                                                                                                                                            79
                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                               199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   379
                                                                      21
                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                        셤
                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
```

382

```
Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                       19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No.:
 Pred. No.:
                   Score:
                                                                                                                                                                                 엄
                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                               유
                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                  ò
                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                      ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                          CCAACAAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC 322
                                                                                                                                                                                                     142
                                                                                                                                                                                                                                                                                                                                                                                                                                         ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                   143 GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG 202
                                                                                                                                                                                                                                                                                                      80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 382
                                                                                                                                                                   40
                                                                                                   20
                                                                                                                                  82
                                                                                                                                                                  AlaGlnCyeLeuArgTyrLyeLyeProGluCyeGlnSerAepTrpGlnCyeProGlyLye
                                                                                                                                                                                                                                                                                                    61 LysArgCysCysProAspThrCysGlylleLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-914-353-20587

US-09-914-353-20587

EQUIDATE 100 NO. USD030165831A1

GENERAL INFORMATION:

APPLICANT: Lee, John

APPLICANT: Thompson, Pamela

APPLICANT: Thompson, Pamela

APPLICANT: Lillie, James

TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR

TITLE OF INVENTION: DEBTIFICATION, ASSESSMENT, PREVENTION, AND

TITLE OF INVENTION: DEBTIFICATION, ASSESSMENT, PREVENTION, AND

TITLE OF INVENTION: THERAPY OF OVARIAN CANCER

FILE REFERENCE: MRI-066

CURRENT APPLICATION NUMBER: US 60/191, 031

PRIOR APPLICATION NUMBER: US 60/191, 031

PRIOR PILING DATE: 2000-06-15

PRIOR FILING DATE: 2000-06-15

PRIOR PILING DATE: 2000-06-15

PRIOR PILING DATE: 2000-06-15

PRIOR PILING DATE: 2000-07-07

PRIOR PILING DATE: 2000-07-07

PRIOR FILING DATE: 2000-07-25

PRIOR FILING DATE: 2000-07-27

NUMBER OF SEQ ID NOS: 22037

SOFTWARE: FREESE FARESE FOR WINDOWN VERSION 4.0

SEQ ID NO 20587

LENGTH: UNA
 000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           383 ATGTGTGGGAAATCCTGCGGTTTCCCCTGTGAAAGCT 418
Mismatches:
Indels:
Gaps:
                                                                x US-10-173-999-153 (1-598)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: misc_feature
LOCATION: 1, 2, 1083, 1084
OTHER INFORMATION: n = A,T,C or
100.00%
100.00%
16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Homo sapiens
                                                                  US-10-613-105-2 (1-132)
 Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 21
US-09-814-353-20587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-814-353-20587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores
                                                                                                                                                                                                                                                                                                                                                                                                        263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        323
                                                                                                                                                                                                                                      41
                                                                                                                                                                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                         101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                             g
                                                                                                                                                                                               g
                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                               유
                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                   ò
                                                                                                                                                                   ò
                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
```

```
188
                                                                                                                                                                                                                                                                                                                                                  248
                                                                                                                                                                                                                                                                                                                                                                                                         249 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 308
                                                                                                                                                                                                                                                                                                                                                                                                                                                            100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  101 ProproAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      428
                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                      80
                                                                                                                                                                  20
                                                                                                                                                                                                                                          40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        189 GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                            81 ProThrArgArgLy8ProGlyLy8Cy8ProValThrTyrGlyGlnCy8LeuMetLeuAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 309 CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         41 AlaGinCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                      LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn
                                                                                                                                                               1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                    69 ArgandricchGegeerterreeerreergergergerreeerregganerergeeneer
                                                                                                                                                                                                                                          21 TrpAlaValGluGlySerGlyLyBSerPheLyBAlaGlyValCyBProFroLyBLyBSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VGS-10-025-514-15

Sequence 15, Application US/10025514

Sequence 15, Application US/10025514

Sequence 15, Application US/20030073217A1

GENERAL INFORMATION:

APPLICANT: Philip J. BARR

APPLICANT: Philip DEMBERTON

TITLE OF INVENTION: MULTIFUNCTIONAL PROTEASE INHIBITORS AND

TITLE OF INVENTION: THEIR USE IN TREATMENT OF DISEASE

FILE REFERENCE: 36622000200

CURRENT APPLICATION NUMBER: US. 60/256,699

FRIOR PILING DATE: 2002-04-03

FRIOR APPLICATION NUMBER: U.S. 60/256,699

FRIOR PILING DATE: 2001-11-20

NUMBER OF SEQ ID NOS: 33

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 15

LENGTH 1525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1525
112
5
9
1084
132
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121 MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                              US-10-613-105-2 (1-132) x US-09-814-353-20587 (1-1084)
 Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-613-105-2 (1-132) x US-10-025-514-15 (1-1525)
 7.28e-82
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7.65e-67
638.50
87.97%
84.21%
83.79%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; ORGANISM: Homo sapiens
US-10-025-514-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

```
APPLICANT: Smithson, Glennda
APPLICANT: Starling, Gary
APPLICANT: Starling, Gary
APPLICANT: Taupher, Raymond J.
APPLICANT: Taupher, Raymond J.
APPLICANT: Zhong, Haihong
APPLICANT: Zhong, Haihong
APPLICANT: Zhong, Mei
APP
                                                                                                 181 CCAGGTAAGTGTCCAGTTACTTACGGTCAATGTTTGATGTTGAACCCACCAAACTTCTGT 240
                                                                                                                                                                                             241 GAAATGGACGGTCAATGTAAGAGAGACTTGAAGTGTTGTATGGGTATGTGTGGTAAGTCC 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR PELING DATE: 2002-12-02

PRIOR APPLICATION NUMBER: 60/336,600

PRIOR FILING DATE: 2001-12-02

PRIOR PELING DATE: 2001-12-07

PRIOR PELING DATE: 2001-12-07

PRIOR PELING DATE: 2001-12-12

PRIOR PELING DATE: 2001-12-17

PRIOR PELING DATE: 2001-12-20

PRIOR PELING DATE: 2001-12-20

PRIOR PELING DATE: 2001-12-20

PRIOR PELING DATE: 2001-12-20

PRIOR PELING DATE: 2001-12-30

PRIOR PELING DATE: 2001-12-31

PRIOR APPLICATION NUMBER: 60/394,903

PRIOR PELING DATE: 2002-04-17

PRIOR APPLICATION NUMBER: 60/390,991

PRIOR PELING DATE: 2002-05-16

PRIOR PELING DATE: 2002-05-16
                                                                                                                                                          106 GlumetAspGlyGlnCysLysArgAspLeuLysCysRetGlyMetCysGlyLysSer
                                         ProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsnProProAsnPheCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 145, Application US/10109290; Publication No. US20040021241A1; GENERAL INFORMATION:
APPLICANT: Anderson, David W.
APPLICANT: Boldog, Ferenc L.
APPLICANT: Boldog, Ferenc L.
APPLICANT: Bulgess, Catherine E.
APPLICANT: Chillakuru, Rajeev A.
APPLICANT: Edinger, Shlomit R.
APPLICANT: Gerlach, Valerie L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           뗩.
                                                                                                                                                                                                                                                                                  126 CysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                  301 TGTGTTTCCCCAGTCAAGGCC 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gorman, Linda
Gould-Rothberg, Bonnie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Guo, Xiaojia
Jeffers, Michael B.
Ji, Weizhen
Li, Li Malyankar, Uriel M.
Miller, Charles E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Murphey, Ryan
Patturajan, Meera
Peyman, John A.
Rastelli, Luca
Rieger, Daniel K.
Shenoy, Suresh G.
                                                                                                                                                                                                                                                                                                                                                                                                                                      -10-309-290-145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                         98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                           셤
                                                                                     g
                                                                                                                                                          8
                                                                                                                                                                                                                                                                                  ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1419 AACCCACCAAACTTCTGTGAAATGGACGGTCAATGTAAGAGAGACTTGAAGTGTTGTATG 1478
1299 AAGAAGAGATGTTGTCCAGACACTTGTGGTATCAAGTGTCTAGACCCCAGTTGACACCCCA 1358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1179 AACCCAACTCAGAAGATGTCCGGAAAGTCTTTCAAGGCCGGTGTTTGTCCACCAAAGAAG 1238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AsnProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMet 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TACAAGAAGCCAGAATGTCAATCCGACTGGCAATGTCCAGGTAAGAAGAGATGTTGTCA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 GACACTTGTGGGTATCAAGTGTCTAGACCCAGTTGACACCCCAAACCCAACTAGAAGAAAG 180
                                                                                              20 ProTrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLys 39
                                                                                                                                                                                                                                                                                                                                           LysLysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrPro 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                AsnProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeu 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 TCTGGAAAGTCTTTCAAGGCCGGTGTTTGTCCACCAAAGAAGTCCGCTCAATGTTTGAGA 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLysLysArgCysCysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AspThrCysGlyIleLysCysLeuAspProValAspThrProAsnProThrArgArgLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SerGlyLygSerPheLygAlaGlyValCygProProLygLygSerAlaGlnCysLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Philip J. BARR
APPLICANT: Philip J. BARR
APPLICANT: Philip J. BARR
APPLICANT: Philip J. BARR
APPLICANT: Philip DEMBERTON
TITLE OF INVENTION: MULTIFUNCTIONAL PROTEASE INHIBITORS AND
TITLE OF INVENTION: THEIR USE IN TREATMENT OF DISEASE
FILE REFERENCE: 36829200200
CURRENT APPLICATION NUMBER: US/10/025,514
CURRENT FILING DATE: 2002-04-03
PRIOR APPLICATION NUMBER: U.S. 60/231,966
PRIOR APPLICATION NUMBER: U.S. 60/331,966
PRIOR FILING DATE: 2001-11-20
PRIOR FILING DATE: 2001-11-20
PRIOR FILING DATE: 2001-11-20
SOFTWARE: FASELSEQ for Windows Version 4.0
SEQ ID NO 3
LENGTH:: 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GETATGTGTGGTAAGTCCTGTGTTTCCCCAGTCAAGGCC 1517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      321
107
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlyMetCyBGlyLysSerCyBValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-613-105-2 (1-132) x US-10-025-514-3 (1-321)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 3, Application US/10025514; Publication No. US20030073217A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.14e-67
635.00
100.00%
100.00%
83.33%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-025-514-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; ORGANISM: Ho
US-10-025-514-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1479
                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 23
                                                                                                                                                                                                                                                                     요
                                     셤
                                                                                                                                             g
                                                                                                                                                                                                   õ
                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             엄
                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
```

```
10999 GGGGAACTGGGTAGAGAGAGTGAGCCTGGGGACACAGCATTAGAGGGATGGAACTGGGT 11058
             US-10-613-105-2 (1-132) x US-10-025-514-7 (1-1525)
                                                                                                                                                                                   CysValSerProValLysAla 132
                                                                                                                                                                                                   312 reretriceceaercaaeece 332
                                                                                                                                                                                                                                                                                                                                                                      2.6e-53
537.50
42.51%
41.70%
70.54%
                                                                                                                                                                                                                                                                                                                                 ; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-322-696-124
14
                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity: 4
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                         US-10-322-696-124
                                                                                                                                                                                     126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        82
                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     음
                             ઠ
                                                       ò
                                                                       g
                                                                                         ð
                                                                                                    a
                                                                                                                      ò
                                                                                                                                   요
                                                                                                                                                     ò
                                                                                                                                                                 셤
                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                     GlumerAspGlyGlnCyslysArgAspLeuLysCysCysMetGlyMetCysGlyLysSer 125
                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                 ProGlyLysCysProvalThrTyrGlyGlnCysLeuMetLeuAsnProProAsnPheCys 105
                                                                                                                                        45
                                                                                                                                                      9
                                                                                                                                       26 SerGlyLysSerPheLysAlaGlyValCysProProLysLysSerAlaGlnCysLeuArg
                                                                                                                                                                                                                                          CCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGATGATAACCCCCCCAATTTCTGT
                                                                                                                                                                                                                                                                                                                                         1525
107
0
0
                                                                   321
107
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                        US-10-613-105-2 (1-132) x US-10-309-290-145 (1-321)
                                                                                                         Gaps:
                                                                                                                                                                                                                                                                                              CysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                         301 TGCGTTTCCCCTGTGAAAGCT 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2.02e-66
635.00
100.00%
100.00%
83.33%
                                                                   3.14e-67
635.00
100.00%
100.00%
83.33%
     TYPE: DNA
ORGANISM: Homo sapiens
                     FEATURE:

, NAME/KEY: CDS

, LOCATION: (1)..(321)

US-10-309-290-145
                                                                                Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
Pred. No.:
                                                            Ignment Scores
                                                                                                                                                                                                                                                                                                                             RESULT 25
US-10-025-514-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-025-514-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA ORGANISM: 1
                                                                                                                                                                                                                  121
                                                                                                                                                                      46
                                                                                                                                                                                    61
                                                                                                                                                                                                    99
                                                                                                                                                                                                                                 86
                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                106
                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                              126
LENGTH:
                                                           Alignment S
Pred. No.:
                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                     g
                                                                                                                                                                                  요
                                                                                                                                                                                                   8 8 8
                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                         ò
                                                                                                                                       ઠે
                                                                                                                                                                     õ
                                                                                                                                                                                                                                                                ઠે
```

```
10938
                                                                                                                                                                 105
                                                                                                                                                                                                                       125
                                                                                 131
                                                                                                                                      191
                                                                                                                                                                                            251
                                                                                                                                                                                                                                                 311
                                                                                                           85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             82
                                                      65
                           71
                                                      86 ProGlyLygCygProValThrTyrGlyGlnCygLeuMetLeuAsnProProAsnPheCys
                                                                                                                                                                                                                       106 GluMetAspGlyGlnCysLysArgAspLeuLysCysWetGlyMetCysGlyLysSer
26 SerGlyLysSerPheLysAlaGlyValCysProProLysLysSerAlaGlnCysLeuArg
                                                                                                                                                                               252 GAAATGGACGGTCAATGTAAGAGAGTTTGAAGTGTTGTATGGGTATGTGTGTAAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26 SerGlyLysSerPheLysAlaGlyValCysProProLysLysSerAlaGlnCysLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           66 AspThrCysGlylleLysCysLeuAspProValAspThrProAsnProThr-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22324
103
2
1
1
141
                                                                                                                                                                                                                                                                                                                                                     Sequence 124, Application US/10322696

Publication No. US20040166490A1

GENERAL INFORMATION:
APPLICANT: MALANDRO, MARC
TITLE OF INVENTION: NOVEL THERAPEUTIC TARGETS IN CANFILLE REFERENCE: 52952201200
CURRENT APPLICATION NUMBER: US/10/322,696
CURRENT FILING DATE: 2003-10-17
NUMBER OF SEQ ID NOS: 186

SOFTWARE: PSELSEQ for Windows Version 4.0

SEQ ID NO 124

LENGTH: 22324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-613-105-2 (1-132) x US-10-322-696-124 (1-22324)
```

Qy 82	82	Oy 39 LysseralaginCysteuargTyrLystysprogluCysGlnSeraspTrpGlnCyspro 58
Db 11059 GATGGGTCCTGCCAGGCCTCCTTGTCAATCCGTCAGTGAGTCACACTGCCCTAAGCAGGA	CACTGCCCTAAGCAGGA 11118	Db 557 AAGCCTGCCCAGTGCCTTGAGCAGCACAATGCCGTACTGACTG
Qy 82Qy	82	Qy 59 GlyLysLysLysRysProAspThrCysGlyIleLysCysLeuAspProValAspThr 78
Db 11119 AGGTAGCCAGCAGCTGATGAAGCAGCGGCATTTAGATAGCCAGGTAGTTGGAAGCCTCC	GGTAGTTGGAAGCCTCC 11178	Db 617 GGAAAGCAGAGGTGCCAAGATGCTTGCGAGTTCCAAGTGCGTGAATCCTGTTCCATT 676
Qy 82	8.	Qy 79 ProAsnProThrArgArgLysProGlyLysCysProValThrTyrGlyGLeuMet 98
Db 11179 CACCTAGTCAGCACTGGGTGGCTGGCCACCTGCATCAATGGGGGGCCTGAAGTTCTAGGA	GGCCTGAAGTTCTAGGA 11238	Db 677 CGCAAACCAGTGTGGAGGAGCCTGGGAGGTGCGTCAAAACTCAGGCAAGATGTATGATG 736
Ογ 82	82	Qy 99 LeuAanProProAanPheCysGluMetAapGlyGlnCysLysArgAapLeuLysCysCys 118
Db 11239 GAGCCAGGTGCTATGTTTGGGGGCCGCCTTAGGGAAGGTGGTGGTGATAGAGGTGGGG	TGGTGATAGAGGTGGGG 11298	Db 737 CTTAACCCCCCAATGTCTGCCAGAGGGACGGGCAGTGTGACGGCAAATACAAGTGCTGT 796
Qy 82	82	Qy 119 MetGlyMetCysGlyLysSerCysValSerProVal 130
Db 11299 AGGGGATGATCCCCCTGCTGAAGCTGGAGCAGGGGCTCACTTAAAAAGTGGGGATGGG	TAAAAAGTGGGGATGGG 11358	Db 797 GAGGGTATATGTGGGAAAGTCTGCCCCCCGATG 832
QY 83Argard		RESULT 28 US-10-305-720-1024
מחרים ב		; Publication No. 10520040010136A1
OY BY THE TOOLY LYSTON ALTERITY COLYCLING SEGMENT BY THE TOOLY LYSTON AND THE TOOLY LYSTON AND THE TOOLY LYSTON AND THE TOOLY COCCCCCANTINE BY THE TOOLY CONTRACT THE TOOLY CONTRACT THE TOOLY CONTRACT THE TOOLY COCCCCCCANTINE BY THE TOOLY CONTRACT THE TOOLY CON		
Qy 105 CysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGlyMetCysGlyLys	etGlyMetCysGlyLys 124 	; FILE REFERENCE: PA-0002-1 CON ; CURRENT APPLICATION NUMBER: US/10/305,720 ; CURRENT FILING DATE: 2002-11-26 ; DELOR APPLICATION NUMBER: 09/016 434
6/411	6611	PRIOR FILING DATE: 1998-01-30
Oy 125 SerCysolSerProVallys 131 Db 11539 TCCTGGGTTTCCCTGTGAAA 11559		; NUMBER OF SEQ ID NOS: 1490 ; SOFTWARE: PELL Program ; SEQ ID NO 1024
RESULT 27		
US-10-322-696-122 ; Sequence 122, Application US/10322696 ; Publication No. US20040166490A1 ; GENERAL INFORMATION:) ORGANISM: Homo sapiens ; FEATURE: ; NAME/KEY: misc_feature ; OTHER INFORMATION: Incyte ID No. US20040010136A1 939088
A REPLICANT: MOSTIBL, DAVID W. A REPLICANT: MAIBHDA'D, MARC TITLE OF INVENTION: NOVEL THERAPEUTIC TARGETS IN CANCER FILE REPERENCE: 529452001200 CURRENT APPLICATION NUMBER: US/10/322.696	œ.	S-1
CURRENT FILING DATE: 2003-10-17		
<pre>// NUMBER OF SEQ ID NOS: 186 // SOFTWARE: FastSEQ for Windows Version 4.0 // SEQ ID NO 122 // LENGTH: 1079 // TYPE: DN // ORGANISM: Mus musculus</pre>		gnment Scores: 6.01e-46 d. No.: 458.00 cent Similarity: 89.81% t.Local Similarity: 88.89% TY Match: 60.10%
		DB: 16 Gaps: 0 US-10-613-105-2 (1-132) x US-10-305-720-1024 (1-325)
5.49e-46 463.50 72.73%	6	Oy 1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaBro 20
59.85% Mismarches: 60.83% Indels: 17 Gaps:		
1-322-696-122 (1-1079)		61
Qy 1 MetLygSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro Db 440 ATGAAGTCCTGCGGCCTTTTACCTTTCACGGGGCCTCCTTGCTCTGGGGATCCTGGCACCC	euGlyThrLeuAlaPro 20 GGGATCCTGGCACCC 499	Oy 40 ralaGlnCysLeuArgTyrLysLysByroGluCysGlnSerAspTrpGlnCysBroGlyLy 60
Oy 21 TrpalaValGluGlySerGlyLyBSerPheLyBAlaGlyValCyBProProLyB	lyValCysProProLys 38	Qy 60 8LysArgCysCysProAspThrCysGlylleLysCysLeuAspProValAspThrProAs 80
Db 500 TGGACTGTGGAAGGAGGCAAAAATGGTATCAAAATCGGAGCCTGCCTGCTAAA	dagccrdccrdaa sse	Db 181 GAAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTNTTGACAC-CCAAA 239

```
20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         424
                                                                                                                                                                                                                                                                                                                              Score:
                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              중 · 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        용
                                                                                                                                                           APPLICANT: Iarcchouk, Natalia
APPLICANT: Iarcchouk, Nark D.
APPLICANT: Iarcchouk, Nark D.
APPLICANT: Brown, Jeffrey L.
TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR THE
TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION AND THERAPY OF
TITLE OF INVENTION: HUMAN CANCERS
TITLE OF INVENTION: HUMAN CANCERS
TITLE OF INVENTION: HUMAN CANCERS
CURRENT APPLICATION NUMBER: 05/10/125,159
CURRENT APPLICATION NUMBER: 06/295,031
PRIOR APPLICATION NUMBER: 66/295,031
PRIOR PILING DATE: 2002-05-31
PRIOR PAPLICATION NUMBER: 66/294,773
PRIOR PILING DATE: 2001-04-18
PRIOR PELING DATE: 2001-04-18
PRIOR FILING DATE: 2001-04-18
NUMBER OF SEQ ID NOS: 88
NUMBER OF SEQ ID NOS: 88
ysproGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsnProProAsnPheC 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    105 ysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGlyMetCysGlyLysS 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerGlyLyBSerPheLyBAlaGlyValCyBProProLyBLyBSerAlaGlnCyBLeu-Ar 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   roAspThrCysGlylleLysCysLeuAspProValAspThrProAsnProThrArgArgL 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gTyrLys-LysProGluCysGlnSerAspTrpGlnCysProGlyLysLysArgCysCysP 65
                                                                                                                                                                                                               Ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaProTrpAlaValGluGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cirirircreriricigerecreaaaaaaaaageaacrereecacerreegereaageac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-613-105-2 (1-132) x US-10-125-159-37 (1-422)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      erCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   384 GCTGCGAAACCCCTGCGAAAGCT 406
                                                 100 nProProAsnPheCysGluMet 107
                                                             299 CCCCCCAA--TTTTGTGAGATG 318
                                                                                                                        ; Sequence 37, Application US/10125159; Publication No. US20030166023A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.94e-33
352.50
67.44%
63.57%
46.26%
                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                 RESULT 29
US-10-125-159-37
                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-125-159-37
                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 37
LENGTH: 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ሯ
                   g
                                                                       요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ሯ
                                                ò
```

```
94 yGlnCysLeu-MetLeuAsnProProAsnPheCys-----GluMetAspGlyGlnCysL 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       124 Argaagrecagegeererrreeeerreergergerreerragegaacrefggaca 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    112 ysArgAspLeuLysCysCysMetGlyMet---CysGlyLysSerCysValSerProVal 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MetLysSerSerGlyLeu-PheProPheLeuValLeuLeuAla-LeuGlyThrLeu-Ala
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ProTrpAla-ValGluGly-SerGlyLysSerPheLys--AlaGlyValCys-ProProL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    nCysProGlyLysLysArgCysCys-ProAspThrCysGlyIle-LysCysLeu-AspPr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       38 yslysSerAlaGlnCysLeu---ArgTyrLysLysProGlu-CysGlnSerAspTrp-Gl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         oValAspThr-ProAsnProThrArgArgLy8Pro-GlyLy8Cy8ProVal-ThrTyrGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 57, Application US/10076816
Publication No. US20030056244A1
GENERAL INFORMATION:
APPLICANT: Huang, Ning
APPLICANT: Hagie, Frank E.
TITLE OF INVENTION: Feed Additive Compositions and Methods
FILE REFERENCE: 50665-8021.US00
CURRENT APPLICATION NUMBER: US/10/076,816
                                                                                                                                                                                                                                                                                                                                                                                                          805
104
21
31
                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                     CANCER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    x US-10-116-802-431 (1-805)
         Sequence 431, Application US/10116802

Publication No. US20030065157A1

GENERAL INFORMATION:
APPLICANT: Amy Lasek
TITLE OF INVENTION: GENES EXPRESSED IN LUNG CAN
FILE REPERENCE: PA-0045 US
CURRENT APPLICATION NUMBER: US/10/116,802
CURRENT FILING DATE: 2002-04-04

PRIOR APPLICATION NUMBER: 60/281,593
PRIOR PILING DATE: 2001-04-04

NUMBER OF SEQ ID NOS: 519

SEQ ID NO 431

LENGTH: 805
                                                                                                                                                                                                                                                                                                                    ; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No: 1159769.1
US-10-116-802-431
                                                                                                                                                                                                                                                                                                                                                                                                        3.57e-31
339.00
72.19%
68.87%
                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-613-105-2 (1-132)
                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
Query Match:
JS-10-116-802-431
                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 31
US-10-076-816-57
```

```
8522 AGCCCTAAGACATCGGCCCTGTGAATCCTTTCTCAACAGGTGTGGAGGAAGCCTGGGAGG 2581
                               CysprovalThrTyrGlyGlnCysLeuMetLeuAsnProProAsnPheCysGluMetAsp 108
                                                                                     109 GlyGlnCysLysArgAspLeuLysCysCysMetGlyMetCysGlyLysSerCysValSer 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            41 AlaGinCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysPro---Gly 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
NAME/KRY: misc_feature
LOCATION: 14, 20, 24, 50, 51, 53, 58, 61, 73, 95, 117, 134, 202, 222,
LOCATION: 265, 267, 270, 272, 287, 292, 301, 308
OTHER INFORMATION: n = A,T,C or G
                                                                                                                                                                                                                  FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             313
2 2 1 1 1 4 1 1 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-613-105-2 (1-132) x US-09-814-353-2826 (1-313)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5.43e-25
283.50
79.17%
76.39%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                    2702 CCGATG 2707
                                                                                                                                          129 ProVal 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
                                                                                                                                                                                                             US-09-814-353-2826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-814-353-2826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID NO 2826
LENGTH: 313
                               83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No.:
                              ò
                                                         셤
                                                                                  ò
                                                                                                            요
                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2282 TCGGCCCTTTCGGGGCTGGAGAGCTGGTCCCCTGCATTGGCTGGAGGCTAGATGGTAGCG 2341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2402 ATGGGGACGAACTTCCTCGCTCAGGAAGGAGATGTTGGGTTAAAGACATGGAGATGTGTT 2461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2462 GCCTGAGCCCTAAGACATCGGCCCTGTGAATCCTTTCTCAACAGGGAGATGTGTTGCCTG 2521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ||| ||||||::::::|||||||
8042 GGTTCCAAGTGCGTGAATCCTGTTCCCATTCGCAAACCAGTGAGCCAGCAGAAAAAGAG 2101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2162 CTTGTTTCTAAGAGCTGTTGGGTCCAACATGTCAGTTAGTCAAGGCCTCTTGCTGCTGTCATT 2221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2222 GGCAGGAAGAGCCATTTGCCTGCAGTTGCCACTCTGTGAGGATGATGGCTTTACAACCAT 2281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2342 AGGAAGCAGGTCCTCTTTCAGGAGGCGTGTTTGGGAGGAGGTGACAAAGGTGATGGGTGG 2401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ProGluCysGlnSerAspTrpGlnCysProGlyLysLysLysArgCysCysProAspThrCys 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ---ArgLysProGlyLys 88
                                                                                                                                                                                                                                                                                                                                                                                                                                       SerPhelysAlaGlyValCysProProLysLysSerAlaGlnCysLeuArgTyrLysLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gly1leLysCysLeuAspProValAspThrProAsnProThrArg------
                                                                                                                                                                                                                                                                                                            4090
57
17
28
160
                                                                                                                                                                                                                                                                                                            Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                           US-10-613-105-2 (1-132) x US-10-076-816-57 (1-4090)
CURRENT FILING DATE: 2002-02-14
PRIOR APPLICATION NUMBER: US 60/269,188
PRIOR FILING DATE: 2001-02-14
PRIOR APPLICATION NUMBER: US 69/847,232
PRIOR PILING DATE: 2001-05-02
PRIOR PILING DATE: 2001-05-06
PRIOR PILING DATE: 2001-02-06
PRIOR PILING DATE: 2000-05-05
PRIOR PILING DATE: 2000-05-05
PRIOR PILING DATE: 2000-05-05
SOFTWARE: PSECS FOR WINDOWS VERSION 4.0
SEQ ID NOS: 60
LENGTH: 4090
                                                                                                                                                                                                                                                                                                                                                                                Gaps:
                                                                                                                                                                                                                                                        Ö
                                                                                                                                                                                                                                         LOCATION: (1)...(4090)
OTHER INFORMATION: n = A,T,C or
                                                                                                                                                                                                                                                                                                          7.69e-24
285.00
28.24%
21.76%
37.40%
                                                                                                                                                                                                                          NAME/KEY: misc feature
                                                                                                                                                                                              ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                            ; OTHER INFORM
US-10-076-816-57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1982
                                                                                                                                                                                                                                                                                                                                                                                                                                        29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      84
                                                                                                                                                                                   TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               83
                                                                                                                                                                                                                                                                                                                                                                    Query Match:
DB:
                                                                                                                                                                                                                                                                                                                . No. .
```

ò 셤 g

ò

g ò g

δ

g

ઠે

셤

ò 셤 ઠે g ઠે

ò

셤

g

ò

ઠે

```
81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               :::
67 TIGAACNCCAGCGGCCTCTTCCCCTTCCNGGGGCTGCTTGCCCTGGGAACNCTGGCACCT 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 127 rédectenceaacécrercaaagrectreaaactecagecresacrercerceraagaarer 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                187 GCCCAGTGCCTTAGANACAAGAAACCTGAGTGCCANAGTGACTGGCAGGGGCCCAAGGGAA 246
187 GCCCAGTGCCTTAGANACAAGAAACCTGAGTGCCANAGTGACTGGCAGGGGCCAAGGGAA 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysPro---Gly 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: misc feature

LOCATION: 14, 20, 24, 50, 51, 53, 58, 61, 73, 95, 117, 134, 202, 222, LOCATION: 265, 267, 270, 272, 287, 292, 301, 308

LOCATION: 265, 267, 270, 272, 287, 292, 301, 308

LOCATION: 265, 267, 270, 272, 287, 292, 301, 308

US-09-814-353-9156
                                                                                                                                                                                                                                            APPLICANT: Thompson, Pamela
APPLICANT: Thompson, Pamela
APPLICANT: Lillie, James
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION: THERAPY OF OVARIAN CANCER
FILE REFERENCE: MT-006B
CURRENT PAPLICATION NUMBER: US/09/814,353
CURRENT PALING DATE: 2001-03-21
PRIOR APPLICATION NUMBER: US 60/191,031
PRIOR PILING DATE: 2000-03-21
PRIOR PILING DATE: 2000-05-25
PRIOR PILING DATE: 2000-06-15
PRIOR PILING DATE: 2000-06-15
PRIOR PILING DATE: 2000-07-07
PRIOR PILING DATE: 2000-07-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            313
55
2
1
1
1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    247 AAAAAAAAAGTTGCCCTNANCCNTNGGGGGAAAAA 282
                                                                                 247 AAAAAAAAGTTGCCCTNANCCNTNGGGGGAAAA 282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LysLysArgCysCysProAspThrCysGlylleLys 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-613-105-2 (1-132) x US-09-814-353-9156 (1-313)
                                           60 LysLysArgCysCysProAspThrCysGlylleLys
                                                                                                                    RESULT 33
US-00-814-353-9156
i Sequence 9156, Application US/09814353
i Publication No. US20030165831A1
i GENERAL INFORMATION:
i APPLICANT: Lee, John
nopi, Paplicant: Thompson, Pamela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5.43e-25
283.50
79.17%
76.39%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 34
US-10-322-696-121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 9156
LENGTH: 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
  음
                                                                                 윰
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ठ
                                         ò
```

```
27153 GCTATCAAAATCGGAGCCTGCCTAAAAAGCCTGCCCAGTGCCTTAAGCTTGAAAG 27212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27573 GAGGAAGCAGGTCCTCTTTCAGGAGGCGTGTTTGGGAGGAGGTGACAAAGGTGATGGGTG 27632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27752 GGGAGGTGCGTCAAAACTCAGGCAAGATGTATGATGCTTAACCCTCCCAATGTCTGCCAG 27811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27393 CCTTGTTTCTAAGAGCTGTTGGGTCCAACATGTCAGTTAGTCAAGGCCTCTTGCTGCCAT 27452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27453 TGGCAGGAAGAGCCATTTGCCTGCAGTTGCCACTCTGTGAGGATGATGGCTTTACAACCA 27512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27513 TTCGGCCCTTTCGGGGCTGGAGAGCTGGTCCCCTGCATTGGCTGGAGGCTAGATGGTAGC 27572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27633 GATGGGGACGAACTTCCTCGCTCAGGAAGGAGATGTTGGGTTAAAGACATGGAGATGTGT 27692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               107 MetAspGlyGlnCysLysAxgAspLeuLysCysCysMetGlyMetCysGlyLysSexCys 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              87 GlytyscysProValThrTyrGlyGlnCysLeuMetLeuAsnProProAsnPheCysGlu 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerPhelysAlaGlyValCysProProLysLysSerAlaGlnCysLeuArgTyrLysLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                --ThrArgArgLysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27693 TGCCTGAGCCCTAAGACATCGCCCCTGTGAATCCTTTCTCAACAGTGTGG-ÀGGÀÀGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               69 GlyllelyscysLeuAspProvalAspThrProAsnPro-----
                                                                                                                                                                                                                                                                                                                                                                              38692
57
17
28
143
                                                       APPLICANT: Morris, David W.
APPLICANT: Malandro, Marc
TITLE OF INVENTION: NOVEL THERAPEUTIC TARGETS IN CANCER
FILE REPERENCE: 529452001200
CURRENT APPLICATION NUMBER: US/10/322,696
CURRENT FILING DATE: 2003-10-17
NUMBER OF SEQ ID NOS: 186
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 121
LENGTH: 38692
                                                                                                                                                                                                                                                                                                                                                                                                      Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-613-105-2 (1-132) x US-10-322-696-121 (1-38692)
                                                                                                                                                                                                                                                                                                                                                                                      Length:
Sequence 121, Application US/10322696
                      Publication No. US20040166490A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                8.95e-22
277.50
30.33%
23.36%
36.42%
                                                                                                                                                                                                                                                                          TYPE: DNA
CORGANISM: Mus musculus
US-10-322-696-121
                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
```

음

g ઠે

```
TITLE OF INVENTION:
TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signaturing OP INVENTION: Sets
TITLE OF INVENTION: Sets
CURRENT APPLICATION NUMBER: US/69/967,768A
CURRENT APPLICATION NUMBER: US/60/236,109
PRIOR FILING DATE: 2000-92-8
PRIOR APPLICATION NUMBER: US/60/236,111
PRIOR APPLICATION NUMBER: US/60/236,111
PRIOR FILING DATE: 2000-92-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   287 GCTNAACCCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTG 228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 347 CNAANCCCAACAAGGNGNAACCCTTGGNAAGTNCCNAGTGANTTNTGGCCAATGTTNGAT 288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    treuAsnProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCy 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              80 ---AsnProThrArgArgLysPro-GlyLysCysProValThrTyrGlyGlnCysLeuMe 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LysLysArgCysCysProAspThrCysGly1leLysCysLeuAspProValAspThrPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             118 BMetGlyMetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-613-105-2 (1-132) x US-09-954-456-1987 (1-411)
                                                    PRIOR FILING DATE: 2000-09-20
PRIOR PELING DATE: 2000-09-20
PRIOR PELING DATE: 2000-09-25
PRIOR PELING DATE: 2000-09-25
PRIOR PILING DATE: 2000-09-25
PRIOR FILING DATE: 2000-09-25
PRIOR PILING DATE: 2000-09-26
PRIOR PILING DATE: 2000-09-27
PRIOR PILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: US/60/235,710
PRIOR PILING DATE: 2000-09-27
PRIOR PILING DATE: 2000-09-27
PRIOR PILING DATE: 2000-09-27
PRIOR PILING DATE: 2000-09-27
PRIOR FILING DATE: 2000-09-27
PRIOR PILING DATE: 2000-09-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-967-768A-3/c

; Sequence 3, Application US/09967768A

; Patent No. US20020150877A1

; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; NAME/KEY; misc feature
; OTHER INFORMATION: n=a,t,g or c
US-09-954-456-1987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.66e-22
264.00
74.67%
70.67%
34.65%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                     APPLICANT: HOLTIGAM, Stephen
TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signaturities of INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signaturities of INVENTION: Sets
FILE REPERENCE: 689290-73
CURRENT APPLICATION NUMBER: US/60/236,033
PRIOR APPLICATION NUMBER: US/60/236,033
PRIOR FILING DATE: 2000-09-28
RIOR PRIOR FILING DATE: 2000-09-28
RIOR FILING DATE: 2000-09-28
RIOR FILING DATE: 2000-09-28
RIOR PRIOR FILING DATE: 2000-09-28
RIOR PRIOR FILING DATE: 2000-09-28
RIOR FILING DATE: 2000-09-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1981, Application US/09954456

Patent No. US20020115057A1

GENERAL INFORMATION:
TITLE OF INVENTION: Process for Identifying Anti-Cancer Therapeutic Agents Using Cancy TITLE OF INVENTION: Sets
FILE REFERENCE: 689290-76

CURRENT APPLICATION NUMBER: US/09/954,456

CURRENT FILING DATE: 2001-09-18

PRIOR APPLICATION NUMBER: US/60/213,617
27812 AGGGACGGGCAGTGTGACGGCAAATACAAGTGCTGTGAGGGTATATGTGGGGAAAGTCTGC 27871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | LieuAsnProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCy 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   347 CNAANCCCAACAAGGNGNAACCCTTGGNAAGTNCCNAGTGANTTNTGGCCAATGTTNGAT 288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LysLysArgCysCysProAspThrCysGlylleLysCysLeuAspProValAspThrPro 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          --- AsnProThrArgArgLysPro-GlyLysCysProValThrTyrGlyGlnCysLeuMe 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sMetGlyMetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  227 cardedeargrenegaaarcerecerrececrereaaacer 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-613-105-2 (1-132) x US-09-964-824A-495 (1-411)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indel8:
                                                                                                                                                                                                                             US-09-964-824A-495/c
Sequence 495, Application US/09964824A
Ferent No. US20020102531A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCATION: (1)...(411)
OTHER INFORMATION: n=a,t,g or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.66e-22
264.00
74.67%
70.67%
34.65%
                                                                                                         27872 CTGCCCCGATG 27883
                                                                  127 ValSerProVal 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 36
US-09-954-456-1987/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-964-824A-495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
DB:
                                                                                                                                                                                                    RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score:
```

셤

ઠ ద ò 셤

ઠે

셤

```
Sequence 9, Application US/09873319A; Sequence 9, Application No. US20030134324A1; Sequence 9, Application No. US20030134324A1; Seneral INFORMATION:

| Publication No. US20030134324A1
| GENERAL INFORMATION: Prakash
| APPLICANT: Mangar, Walliam E. | APPLICANT: Wagar, Iwao | APPLICANT: Wagar, Iwao | APPLICANT: Wagar, Iwao | APPLICANT: Yanamanco, Jun | TITLE OF INVENTION: Hyperplasta Using Gene Expression Profiles | TITLE OF INVENTION: Hyperplasta Using Gene Expression Profiles | TITLE OF INVENTION: Hyperplasta US/09/873,319A | CURRENT APPLICATION NUMBER: US 60/223,323 | EARLIER PILING DATE: 2000-08-07 | WIMBER PILING DATE
                                                                                                 288
                                                                                                                                                                                                                                                               118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             287 GCTNAACCCCCCCATTTCTGTGAGATGGATGCCCAGTGCAGGGTGACTTGAAGTGTTG 228
                                                                                                                                                                                                                                                                                    287 GCTNAACCCCCCCAATTTCTGTGAGATGGCCAGTGCCAGTGCAACGTGACTTGAAGTGTTG 228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LygLysArgCysCysProAspThrCysGly11eLysCysLeuAspProValAspThrPro 79
                                                                                                                                                                98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98
                                                                      79
                                                                                                                                                                80 ---AsnProThrArgArgLysPro-GlyLysCysProValThrTyrGlyGlnCysLeuMe
                                                                                                                                                                                                                                                            98 tLeuAsnProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98 tLeuAsnProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCy
                                                                                                                                                                                                            347 CNAANCCCAACAAGGNGNAACCTTGGNAAGTNCCNAGTGANTTNTGGCCAATGTTNGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              80 ---AsnProThrArgArgLysPro-GlyLysCysProValThrTyrGlyGlnCysLeuMe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        347 CNAANCCCAACAAGGNGNAACCCTTGGNAAGTNCCNAGTGANTTNTGGCCAATGTTNGAT
                                                                        60 LyglysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: Genbank Accession No. US20030134324A1 AA026641
                                                                                                                                                                                                                                                                                                                                                    118 sMetGlyMetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    411
53
3
17
17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
                             US-10-613-105-2 (1-132) x US-09-960-706-16 (1-411)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-613-105-2 (1-132) x US-09-873-319-9 (1-411)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ų
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: unsure
LOCATION: (1)..(411)
OTHER INFORMATION: n = a or c or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.66e-22
264.00
74.67$
70.67$
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 9
LENGTH: 411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-873-319-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              엽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                        ò
                                                                                                                  셤
                                                                                                                                                                  ò
                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                             유
                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 38

US-09-960-706-16/c

US-09-960-706-16/c

Publication No. US20030134280A1

GENERAL INFORMATION:
TITLE OF INVENTION:
GENERAL GENERAL GENERAL BEADLE STORESSION Profiles
TITLE OF INVENTION:
TITLE OF INVENTION UNMER: US/09/960,706

CURRENT FILING DATE: 2001-09-24

PRIOR FILING DATE: 2000-08-07

PRIOR FILING DATE: 2000-08-07

PRIOR FILING DATE: 2001-06-05

NUMBER OF SEQ ID NOS: 1124-05

SOFTWARE: PATENTIN VET. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tLeudanProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCy 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          287 GCTNAACCCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGGGTGAACTTGAAGTGTTG 228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 347 CNAANCCCAACAAGGNGNAACCCTTGGNAAGTNCCNAGTGANTTNTGGCCAATGTTNGAT 288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ---AsnProThrArgArgLysPro-GlyLysCysProValThrTyrGlyGlnCysLeuMe 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60 LysLysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: Genbank Accession No. US20030134280A1 AA026641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sMetGlyMetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   227 CATGGGCATGTGTGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     411
33
17
17
                                                                                                                                                                                                                                                                                                             411
53
11
13
14
15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-613-105-2 (1-132) x US-09-967-768A-3 (1-411)
                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                  NAME/KEY: misc feature
LOCATION: (1)...(411)
OTHER INFORMATION: n=a,t,g or c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCATION: (1)...(411)

OTHER INFORMATION: n = a or c
US-09-960-706-16
NUMBER OF SEQ ID NOS: 325
SOFTWARE: Patentin version 3.0
SEQ ID NO 3
                                                                                                                                                                                                                                                                                                        1.66e-22
264.00
74.67%
70.67%
34.65%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.66e-22
264.00
74.67%
70.67%
34.65%
                                                                                                 TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: unsure
                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                         US-09-967-768A-3
                                                                           LENGTH: 411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           118
                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                  Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

or

a, c, g,

```
US-10-613-105-2 (1-132) x US-09-814-353-15540 (1-188)
 ; LOCATION: (72)..(86)
; OTHER INFORMATION: n is
US-10-430-201-2237
                                                                                                                      Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-814-353-15540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JS-09-814-353-15540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
Pred. No.:
                                                                           Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match:
                                                                                            Pred. No.:
                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                     ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                   US-10-430-201-2236

Sequence 2236, Application US/10430201

Sequence 2236, Application US/10430201

Sequence 2236, Explication US/10430201

GENERAL INFORMATION:

APPLICANT: Li, Linheng

TITLE OF INVENTION: Method for Predicting Gene Potential and Cell Commitment

TITLE OF INVENTION: Without (IP-010)

CURRENT APPLICATION NUMBER: US/10/430,201

CURRENT FILING DATE: 2003-05-05

FRIOR FILING DATE: 2002-05-03

NUMBER OF SEQ ID NOS: 4879

SOFTWARE: PatentIn version 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Li, Linheng
TITLE OF INVENTION: Method for Predicting Gene Potential and Cell Commitment
FILE REPERENCE: 40716 (IP-01)
CURRENT APPLICATION NUMBER: US/10/430,201
CURRENT FILING DATE: 2003-05-05
PRIOR PRIOR PRICATION NUMBER: US 60/370,114
PRIOR FILING DATE: 2002-05-03
NUMBER OF SEQ ID NOS: 4879
SOFTWARE: PATENTIN VERSION 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60 GGAGCCTGCCCTININININININININININICAGTGCCTTAAGCTTGAGAAGCCACAATGCCGT 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180 GTGAATCCTGTTCCCATTCGCAAACCAGTGTGGAGGAAGCCTGGGAGGTGCGTCAAAACT 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuGlyThrLeuAlaProTrpAlaValGluGlySerGlyLys-----SerPheLyaAla 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlyValCysProProLysLysSerAlaGlnCysLeuArgTyrLysLysProGluCysGln 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        53 SerAspTrpGlnCysProGlyLysLysArgCysCysProAspThrCysGlyIleLysCys 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                73 LeuAspProValAspThrProAsnProThrArgArgLysProGlyLysCysProValThr 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3 CTGGGGATCCTGGCACCCTGGACTGTGGAAGGA---GGCAAAAATGATGCTATCAAAATC 59
248
222
232
23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-613-105-2 (1-132) x US-10-430-201-2236 (1-248)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                           ų
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 2237, Application US/10430201
; Publication No. US20040162679A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                             ຫ້
                                                                                                                                                                                                                                                                                                                                                                                                                                           ΰ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5.48e-22
257.50
68.75%
55.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                           a,
                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: (72)...(86)
OTHER INFORMATION: n is
                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-430-201-2236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 41
US-10-430-201-2237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                           SEQ ID NO 2236
LENGTH: 248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 2237
LENGTH: 248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match:
                                                                                                                                                                                                                                                                                                                                                                                    FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No.:
                                                        RESULT
                    용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
```

```
119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15 LeuGlyThrLeuAlaProTrpAlaValGluGlySerGlyLyg-----SerPheLygAla 32
                                                                                                                                                                                                                                                                                                                                           33 GlyValCysProProLysLysSerAlaGlnCysLeuArgTyrLysLysProGluCysGln 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                  73 LeuAspProValAspThrProAsnProThrArgArgLysProGlyLysCysProValThr 92
                                                                                                                                                                                                                                                                        3 CTGGGGATCCTGGGACCCTGGAAGAA---GGCAAAAATGATGCTATCAAAATC
                                                                                                                                                                                                                                                                                                                                                                         60 GGAGCCTGCCCTNNNNNNNNNNNNNCAGTGCCTTAAGCTTGAGAGCCACACAATGCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFUGURATION:

APPLICANT: Lee, John
APPLICANT: Thompson, Pamela
APPLICANT: Thompson, Pamela
APPLICANT: Thompson, Pamela
APPLICANT: Thompson, Pamela
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION: THERAPY OF OVARIAN CANCER
FILE REFERENCE: MIL-0068
CURRENT APPLICATION NUMBER: US 60/291,031
PRIOR APPLICATION NUMBER: US 60/207,124
PRIOR PELING DATE: 2000-03-21
PRIOR PILING DATE: 2000-06-15
PRIOR PELING DATE: 2000-06-15
PRIOR APPLICATION NUMBER: US 60/211,940
PRIOR PILING DATE: 2000-06-15
PRIOR APPLICATION NUMBER: US 60/216,820
PRIOR APPLICATION NUMBER: US 60/216,820
PRIOR APPLICATION NUMBER: US 60/220,661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FOR
        248
222
3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              188
170
000
000
     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                       US-10-613-105-2 (1-132) x US-10-430-201-2237 (1-248)
                                                                                                                                      Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; Sequence 15540, Application US/09814353; Publication No. US20030165831A1; GENERAL INFORMATION:
5.48e-22
257.50
68.75$
55.00$
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2.18e-20
243.00
95.92%
93.88%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Homo sapiens
```

```
US-10-613-105-2 (1-132) x US-09-884-441-377 (1-292)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-884-441-377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 377
LENGTH: 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                         RESULT 43
US-10-125-159-43
ISGUAGE 43. Application US/10125159
FUDLication No. US20030166023A1
GENERAL INFORMATION:
APPLICANT: Jarcchouk, Natalia
APPLICANT: Jarcchouk, Natalia
APPLICANT: Brown, Jeffrey L.
TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR THE
TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION AND THERAPY OF
TITLE OF INVENTION: HUMAN CANCERS
FILE REFERENCE: MRI-029
CURRENT FILING DATE: 2002-04-18
FRIOR APPLICATION NUMBER: US/10/125,159
CURRENT FILING DATE: 2001-04-18
FRIOR APPLICATION NUMBER: 60/295,031
PRIOR FILING DATE: 2001-04-18
FRIOR PRILING DATE: 2001-04-18
FRIOR FILING DATE: 2001-04-18
FRIOR FR
303 AACATATCAAACACTCTCCCGGGT-----GTACGCGGGGGCCAATGTTTGATGCTT 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 44
US-10-125-159-41
US-10-125-159-41
Sequence 41, Application US/10125159
Publication No. US20030166023A1
GENERAL INFORMATION:
APPLICANT: lartchouk, Natalia
APPLICANT: Ayers, Mark D.
APPLICANT: Ayers, Mark D.
APPLICANT: Brown, Jeffrey L.
APPLICANT: A DEVENTION: NOVEL COMPOSITIONS AND METHODS FOR THE
TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION AND THERAPY OF
                                                                                                              40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             80 AsnProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeu 99
                                                                                                              TrpAlaValGluGlySerGlyLy8SerPheLy8AlaGlyValCy8ProProLy8Ly8Ser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      518
1
1
3
1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-613-105-2 (1-132) x US-10-125-159-43 (1-518)
                                                                                                                                                                                                                                                         161 GCCCAGTGCCTTAGATACAAGAAACCT 187
                                                                                                                                                                                                                       41 AlaGlnCysLeuArgTyrLysLysPro 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.34e-18
232.50
83.02%
81.13%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-125-159-43
                                                                                                              21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match:
DB:
                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                              g
                                                                                                              ð
                                                                                                                                                                  g
                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
```

```
58 oGlyLysLysLysArgCysCysProAspThrCysGlylleLysCysLeuAspProValAspTh 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              s ecacciagaacregegaagecrrregaaagrrcrrcaaaecregaerrreracreaae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   39 LysSeralaGlnCysLeuArgTyrLys-LysProGluCysGlnSerAspTrpGlnCysPr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19 AlaProTrpAlaValGluGlySerGlyLysSerPhelysAlaGlyValCysProProLy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            THE THERAPY AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      292
0 0 0 0
0 0 0 0
                                                                                                                                                                                                                                                                                                                                                          208
2 47
1 18
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 377, Application US/0988441
Fatent No. US20020119158A1
GENERAL INFORMATION:
APPLICANT: Algate, Paul A.
APPLICANT: Carter, Darrick
TITLE OF INVENTION: OCMPOSITIONS AND METHODS FOR THE
TITLE OF INVENTION: DIAGNOSIS OF OVARIAN CANCER;
FILE REFERENCE: 210121.462C7
CURRENT APPLICATION NUMBER: US/09/884,441
CURRENT FILING DATE: 2001-06-18
NUMBER OF SEQ ID NOS: 489
SOFTWARE: FRACESQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-613-105-2 (1-132) x US-10-125-159-41 (1-208)
TITLE OF INVENTION: HUMAN CANCERS
FILE REFERENCE: MRI-029
CURRENT APPLICATION NUMBER: US/10/125,159
CURRENT FILING DATE: 2002-04-18
PRIOR APPLICATION NUMBER: 60/295,031
PRIOR PILING DATE: 2002-05-31
PRIOR PILING DATE: 2001-04-18
SPRIOR PILING DATE: 2001-04-18
SOFTWARE: FEBESCE FOR WINDOWS VERSION 4.0
SOFTWARE: FEBESCE FOR WINDOWS VERSION 4.0
SECOID NO 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       185 ccccracccaggadadadada 206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      78 rProAsnProThrArgArgLys 85
                                                                                                                                                                                                                                                                                                                                             8.98e-19
230.00
72.06%
69.12%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7.09e-18
224.00
100.00%
100.00%
29.40%
                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Homo sapiens
US-10-125-159-41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Homo sapiens
US-09-884-441-377
                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
Query Match:
D8:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
```

8 6 6 6

Search completed: October 24, 2004, 06:01:17 Job time: 452 secs

This Page Bion's (1900)

```
7, Appli
33, Appli
11, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11, Appli

5183884

10, Appl

20, Appli

10, Appli

11, Appli

11, Appli

11, Appli

11, Appli

12, Appli

13, Appli

13, Appli

105, Appli

105, Appli

105, Appli

107, Appli

108, Appli

109, Appli

109, Appli

109, Appli

100, Appli

100, Appli

101, Appli

101, Appli

102, Appli

103, Appli

104, Appli

105, Appli

106, Appli

107, Appli

108, Appli

109, Appl
                                                                           Appl
Appli
Appli
3, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 3. A Sequence 2. A Sequence 2. A Sequence 3. A Sequence 3. A Sequence 3. A Sequence 3.14. Sequence 3.14. Sequence 3.14. Sequence 3.14. Sequence 3.14. Sequence 3.14. Sequence 5.1. A Sequence 5.1. A Sequence 5.1. Sequence 5.1.
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                      Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Seq
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                 Sequence
Sequence
Sequence
                                                                                                                                                                       Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                          Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                     Sequence
Sequence
Sequence
                                                                                                                               US-09-016-434-673
US-08-379-437-5
US-08-379-437-5
US-08-379-437-5
US-08-379-437-7
US-08-379-437-7
US-08-379-437-7
US-08-379-437-7
US-08-378-38-34
US-08-374-051-11
PCT-US95-11445-11
US-08-314-051-12
US-08-314-051-13
US-08-314-051-13
US-08-314-051-13
US-08-314-051-13
US-08-314-051-13
US-08-314-051-13
US-08-314-051-13
US-08-314-051-13
US-08-314-051-13
US-08-313-586-29
US-09-127-0767-1693
US-09-127-0767-1693
US-09-1170-699-3
US-09-1170-699-3
US-09-1170-699-3
US-09-1170-127-3
US-09-314-127-2
US-09-314-127-2
US-09-314-127-2
US-09-314-127-2
US-09-314-127-2
US-09-314-127-2
US-09-314-127-2
US-09-314-127-2
US-09-314-127-2
US-09-314-127-3
US
US-08-322-742-14
US-09-016-434-1249
US-08-304-051-15
US-08-304-051-16
PCT-US95-11445-15
PCT-US95-11445-16
US-08-379-437-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-07-757-022B-31
US-07-757-022B-89
US-07-757-022B-91
US-07-757-022B-115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S-07-757-0228-33

S-07-757-0228-79

S-07-757-0228-105

S-07-757-0228-117

S-07-757-0228-113

S-07-757-0228-113

S-07-757-0228-113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S-07-757-022B-55
S-07-757-022B-85
S-07-757-022B-77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-939-366-27
US-09-467-997-6
US-09-105-537-30
US-09-105-537-5
US-09-320-878-19
US-09-320-87-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-489-039A-51
US-09-799-451-908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5183884-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6677
13842
38578
38506
38506
38506
319
319
393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       112.5
112.5
112.5
109.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           109
107.5
106
107.5
101
101.5
100.5
100.5
100.5
100.5
100.5
100.5
100.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      95.5
94.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 109
109
109
   υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1024, Ap
Sequence 5, Appli
Sequence 377, App
Sequence 377, App
Sequence 3787, App
Sequence 41, Appl
Sequence 11, Appl
Sequence 1133, Ap
Sequence 1133, Ap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1271, Ap
Sequence 1024, Ap
                                                                                                                                   October 24, 2004, 03:59:24 ; Search time 86 Seconds (without alignments) 1090.978 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                             US-10-613-105-2
762
1 MKSSGLFPFLVLLALGTLAP......RDLKCCMGMCGKSCVSPVKA 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                1649014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Issued Patents NA:*
1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/pcTuS_COMB.seq:*
                       GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                               nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-016-434-1271
US-09-016-434-1024
US-07-963-5388-5
US-08-483-503A-2
US-09-404-879A-377
US-09-667-857-377
US-09-513-999C-3787
US-09-513-999C-3787
US-09-023-655-1233
US-09-023-655-1233
US-09-244-111-11
                                                                                                                                                                                                                                                                                                                                                                                                                                            Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                          824507 segs, 355394441 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries
                                                                                                                                                                                                                                                                                                          Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3594
11994
1180
2292
2392
2315
3215
4478
453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                          BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1000.0
60.1
60.1
29.4
20.7
20.7
20.0
20.0
119.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     762
3348
3348
3348
165.5
165.5
1152.5
1149.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score
                                                                                                                                                                                                                 Title:
Perfect score:
                                                                                                                                                                                                                                                                                          Scoring table:
                                                                                               protein
                                                                                                                                                                                                                                                       Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Jatabase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26433
                                                                                                                                     Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Result
No.
```

```
138
                                                                                                                                                                                                                                                                                              100
                                                                                                                                                                                                                                                                                                                                                     101 ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                       139 GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGCCAGGGAAG 198
                                                                                                                                                                                                                                                                 199 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 258
                                                                                                                                                                                                                                                                                                                         259 CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC 318
                                                                                                                   40
                                                                                                                                                                             မ္မ
                                                                                                                                      79 TGGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTCAAGAATCT
                                                                                                                                                                                                                                      61 LysargCysCysProAspThrCysGlylleLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                              81 ProThrArgArgLy8ProGlyLy8Cy8ProValThrTyrGlyGlnCy8LeuMetLeuAan
                                                            1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                             19 ATGAAGTCCAGCGGCCTCTTCCCCTTCCTGGTGCTGCCTTGCCCTGGGAACTCTGGCACCT
                                                                                                                   21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer
                                                                                                                                                                             41 AlaGlnCyaLeuArgTyrLysLysProGluCyaGlnSerAapTrpGlnCyaProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-016-434-1024

Sequence 1024, Application US/09016434

Sequence 1024, Application US/09016434

Sequence 1024, Application US/09016434

PAPPLICANT: No. 5500938

APPLICANT: Jeffrey J. Seilhamer

TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF SIGNALING

TITLE OF INVENTION: PATHWAY GENE EXPRESSION

NUMBER OF SEQUENCES: 1490

CORRESPONDENCE ADDRESS:

ADDRESSEE: INCYTE PHARMACEUTICALS, INC.

STREET: 3174 PORTER DRIVE

COUNTRY: USA

COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121 MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                   379 ATGTGGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 414
                                US-10-613-105-2 (1-132) x US-09-016-434-1271 (1-594)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 325 base pairs
TYPE: nucleic acid
                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                     유
                                                                                                                                                                                                                                                                             RESULT 1

US-09-016-434-1271

Sequence 1271, Application US/09016434

Sequence 1271, Application US/09016434

Patent No. 6500938

GENERAL INFORMATION:
APPLICANT: Janice Au-Young
APPLICANTON: PATHWAY GENE EXPRESSION
NUMBER OF SEQUENCES: 1497
CORPORTES INCYTE PHARMACEUTICALS, INC.
STREET: 3174 PORTER DRIVE
COUNTRY: USA
COUNTRY: USA
COUNTRY: USA
COUNTRY: USA
COUNTRY: USA
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WOR'D PERFECT 6.1 for Windows/MS-DOS 6.2
CURRENT APPLICATION NUMBER: US/09/016,434
FILING DATE: HEREWITH
FILING DATE: FILING DATA:
APPLICATION NUMBER:
                                                                                                                                                                                Sequence Sequence 6
                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             594
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
US-07-757-022B-135
US-07-757-022B-131
US-07-757-022B-93
US-07-757-022B-95
US-07-757-022B-95
US-07-757-022B-67
US-07-757-022B-67
US-07-757-022B-103
US-07-757-022B-103
US-07-757-022B-103
US-07-757-022B-103
US-07-757-022B-103
US-07-757-022B-103
US-07-757-022B-103
US-07-757-022B-103
US-07-757-022B-103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indel8:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: 94-0002 US
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEFAX: (650) 845-4166
INFORMATION FOR SEQ ID NO: 1271:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.21e-72
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 594 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
   LIBRARY: GENBANK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-016-434-1271
```

```
APPLICATION NUMBER: US/07/963,538B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-07-963-538B-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-483-503A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: UNFUGUA, EIKO
APPLICANT: INAIZUMI, ATGUSH
APPLICANT: INAIZUMI, ATGUSH
APPLICANT: WATANABE, KUNIHITO
APPLICANT: WATSUWOTO, YOHICHI
APPLICANT: TAKEUCHI, AKIKO
TITLE OF INVENTION: PROCESS FOR PRODUCTION THEREOF BY RECOMBINANT GENE
TITLE OF INVENTION: TECHNOLOGY
NUMBER OF SEQUENCES: 36
CORRESPONDENCE ADDRESSS:
ADDRESSEE: COOLEY GODWARD LLP
STREET: FIVE PALO ALTO SQUARE, 4TH FLOOR
CITY: PALO ALTO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  nProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAs 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCCTCCAAGGAAATC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181 GAAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTNTTGACAC-CCAAA 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240 CCCAACAAGGAGGAAGCT-GGGAAGTGNCCAGTGACTTATGGNCAATGTTTGATGTTAAN 298
                                                                                                                                                                                                                                                                                                                                       1 ATGAAGTCCAGGGGNCTCTTNCCCTTNCTGGTGCTTGCTTGCCCTGGGAACTCTGGCACCT 60
                                                                                                                                                                                                                                                                                                                                                                                             21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCys-ProProLysLysSe 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8Ly8ArgCy8Cy8ProAspThrCy8GlyIleLy8Cy8LeuAspProValAspThrProAs 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rAlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLy 60
                                                                                                                                                                                                                                                                                                                     MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                 US-10-613-105-2 (1-132) x US-09-016-434-1024 (1-325)
                                                                                                                                                                                                                          [ndel8:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             nProProAsnPheCysGluMet 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                299 ccccccaa--rrrrcrcacarc 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READBLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; Sequence 5, Application US/07963538B; Patent No. 5851983; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUGIYAMA, TAKASHI
KAMIMURA, TAKASHI
MASUDA, KENICHI
OKADA, MASAHIRO
                                                                                                                                 3.58e-40
458.00
89.81%
88.89%
STRANDEDNESS: single
TOPOLOGY: linear
IMMEDIATE SOURCE:
                                                    ; LIBRARY: CERVNOT01
; CLONE: 939088
US-09-016-434-1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        94306-2155
                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         USA
                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 3
US-07-963-538B-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       40
                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100
                                                                                                                                                                                                                        Query Match
DB:
                                                                                                                                                     ..
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
```

```
61 GGTCAGTGTCTGATGCTGAACCCGCCGAACTTCTGTGAAATGGACGGTCAGTGTAAACGA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94 GlyGlnCysLeuMetLeuAsnProProAsnPheCysGluMetAspGlyGlnCysLysArg 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 GATCCGGTCGACACCCCGACGCGTCGTAAACCGGGTAAATGTCCGGTTACATAT 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             74 ASPProValAspThrProAsnProThrArgArgLysProGlyLysCysProValThrTyr 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             114 AspleulysCysCysMetGlyMetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GATCTGAAATGTTGTATGGGTATGTGTGTAAATCTTGTGTTTCTCCGGTTAAAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 2, Application US/08483503A
Sequence 2, Application US/08483503A
Patent No. 6017880
GENERAL INFORMATION:
APPLICANT: Thompson, Robert C.
APPLICANT: Thompson, Robert C.
APPLICANT: Information: INHIBITION OF RETROVIRUS INFECTION
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10000
460000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-613-105-2 (1-132) x US-07-963-538B-5 (1-194)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: NEELEY PH.D., RICHARD L.
REGISTRATION NUMBER: 30,092
REFERENCE/DOCKET NUMBER: TEJN-005/02US
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
PRIOR APPLICATION: 330
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/843,359
FILING DATE: 25-FBE1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/408,483
FILING DATE: 22-AGG-1989
FILING DATE: 17-GUL-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: UP 4-212399
FILING DATE: 17-GUL-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: UP 4-212398
FILING DATE: 17-GUL-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: UP 6-213019
FILING DATE: 24-DEC-1991
PRIOR APPLICATION NUMBER: UP 62-330219
FILING DATE: 28-DEC-1991
APPLICATION NUMBER: UP 62-330219
FILING DATE: 28-DEC-1987
ATTORNEY AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA (synthetic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8.47e-29
348.00
100.00$
100.00$
45.67$
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: 415-857-0663
TELEX: 380816 COOLEY PA
INFORMATION FOR SEQ ID NO: 6
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 194 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
```

```
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 377
LENGTH: 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                224.00
100.00%
100.00%
29.40%
                                                                                                                                                         2.23e-15
                                                                                                                                                                         224.00
100.00%
100.00%
29.40%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: Homo Bapiens
US-09-667-857-377
                                                                            ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
                                                                                              JS-09-404-879A-377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JS-09-667-857-377
                                                                                                                                       Alignment Scores:
Pred. No.:
                                                            TYPE: DNA
                                                                                                                                                                                                                                  Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TyrGlyGlnCysLeuMetLeuAsnProProAsnPheCysGluMetAspGlyGlnCysLys 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     113 ArgAspLeuLysCysCysMetGlyMetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGATCCTGTTGACACCCCAACAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACT 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LeuAspProValAspThrProAsnProThrArgArgLysProGlyLysCysProValThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 377, Application US/09404879A

Sequence 377, Application US/09404879A

Patent No. 6468546

GENERAL INFORMATION:
APPLICANT: Mitcham, Jennifer L.
APPLICANT: Algate, Paul A.

TITLE OF INVENTION: COMPOSIS OF OVARIAN CANCER
FILE REFERENCE: 210121.462C2

CURRENT APPLICATION NUMBER: US/09/404,879A

CURRENT PILING DATE: 1999-09-24

NUMBER OF SEQ ID NOS: 393
                                                                                      COMPUTER READABLE FORM:

MEDIUM TYPE: R109Py disk
COMPUTER READABLE FORM:
MEDIUM TYPE: R109Py disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/NS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/483,503A
FILING DATE: 07-JUN-1995
CLASSIFICATION: 514
APPLICATION NUMBER: US 08/209,040
FILING DATE: 09-MRR-1994
FRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/943,369
FILING DATE: 09-MRR-1994
FRID BATCH AGENT INFORMATION:
NAME: Barker, M. Paul
REGISTRATION NUMBER: 32,013
REFERENCE/DOCKET NUMBER: 04189.0084-02000
TELEPHONE: 202-408-4000
TELEFAX: 202-408-4100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-613-105-2 (1-132) x US-08-483-503A-2 (1-180)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps:
 ADDRESSEE: Dunner, L.L.P.
STREET: 1300 I Street, N.W
CITY: Weabington
STATE: D.C.
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6.9e-28
339.00
96.67%
96.67%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 180 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 5
US-09-404-879A-377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-483-503A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
```

```
95 GINCYSLEUMELLEUASDProProAsnPheCysGluMetAspGlyGlnCySLysBArgAsp 114
                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                  95 GlnCysLeuMetLeuAsnProProAsnPheCysGluMetAspGlyGlnCysLysArgAsp
                                                                                                                                                                                                                          1 caargringargcrinaaccccccaarricrgrgaarggarggcagrgaagggrgac
                                                                                                                                                                                                                                                           115 LeulysCysCysMetGlyMetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rreaagrerrecardescargrersessaarcersestrrecerrersaaaser 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                THE THERAPY AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               292
38
0
0
0
0
                                                                                                                                                                                                                                                                                                                                                                         Sequence 37.3 Application US/09667857

Sequence 37.3 Application US/09667857

GENERAL INFORMATION:
APPLICANT: Mitcham, Jennifer L.
APPLICANT: Mitcham, Jennifer L.
APPLICANT: King, Gordon E.
APPLICANT: Fling, Steven P.
APPLICANT: Retest, Marc W.
APPLICANT: Retest, Marc W.
APPLICANT: Reded, Steven P.
APPLICANT: Reded, Steven P.
APPLICANT: Reded, Steven G.
APPLICANT: Carter, Darrick
TITLE OF INVENTION: ComPOSITIONS AND METHODS FOR THE
TITLE OF INVENTION: LOMPOSITIONS
TITLE OF INVENTION: UNMBER: US/09/667,857
CURRENT APPLICATION NUMBER: US/09/667,857
CURRENT APPLICATION NUMBER: US/09/667,857
CURRENT FILLNG DATE: 2000-09-20

SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                            US-10-613-105-2 (1-132) x US-09-404-879A-377 (1-292)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-613-105-2 (1-132) x US-09-667-857-377 (1-292)
                                                                                                      Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-513-999C-3787
; Sequence 3787, Application US/09513999C
```

```
105 ----CysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGlyMetCysGly 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 292 ACCTICIGCICICIGCCAAIGAI-------AAGGAGGGIICCIGC 330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  331 CCCCAG-----GTGAACATTAACTTTCCCCAGCTCGGCCTCGTCGGGAC 375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      90 ProValThrTyrGlyGlnCysLeuMetLeuAsnProProAsnPhe------ 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    232 GAGTGCGTCTCGGACAGCGAATGCGCCGACAACCTCAAGTGCTGCAGCGCGGGCTGTGCC 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31 LygAlaGlyValCysProProLygLyBSerAlaGln---CygLeuArgTyrLygLyBPro 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            50 GlucysGlnSerAspTrpGlnCysProGlyLysLysArgCysCysProAspThrCysGly 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             70 IleLysCysLeuAspProValAspThrProAsnProThrArgArgLysProGlyLysCys 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11 ValLeuLeuAlaLeuGlyThrLeuAlaProTrpAlaValGluGlySerGlyLyBSerPhe 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           644
444
25
25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-613-105-2 (1-132) x US-10-000-489-41 (1-643)
              FILE REFERENCE: 91.056.DIV
CURRENT APPLICATION NUMBER: US/10/000,489
CURRENT APPLICATION NUMBER: US/10/000,489
REIOR APPLICATION NUMBER: US 09/924,340
PRIOR FILING DATE: 2001-08-06
PRIOR FILING DATE: 2001-08-06
PRIOR FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2001-06-15
PRIOR RELING DATE: 2001-06-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Lys---SerCysValSerPro 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.09e-08
165.50
45.67%
34.65%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCATION: 463..643
NAME/KEY: polyA signal
LOCATION: 607..612
NAME/KEY: polyA..612
LOCATION: 628..643
                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION: 91..462
NAME/KEY: 3'UTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1..90
CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: 5'UTR
LOCATION: 1..90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-000-489-41
                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 41
LENGTH: 643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             258 ACCTTCTGCTCTGCCCAATGAT-------AAGGAGGGTTCCTGC 296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ProValThrTyrGlyGlnCysLeuMetLeuAsnProProAsnPhe------- 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ---CysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGlyMetCysGly 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         342 CAGTGCCAGGTGGACAGCCAGTGTCCTGGCCAGATGAAATGCTGCCGCAATGGCTGTGGG 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ValLeuLeuAlaLeuGlyThrLeuAlaProTrpAlaValGluGlySerGlyLysSerPhe 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LysAlaGlyValCysProProLysLysSerAlaGln---CysLeuArgTyrLysLysPro 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GluCysGlnSerAspTrpGlnCysProGlyLysLysArgCysCysProAspThrCysGly 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   70 IleLysCysLeuAspProValAspThrProAsnProThrArgArgLysProGlyLysCys 89
                                                         APPLICANT: Duclert, A. APPLICANT: Glordano, J.Y.
TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins. Patent No. 6783961
FILE REFERENCE: 59.US2.REG
CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT FILING DATE: 2000-02-24
PRIOR PAPLICATION NUMBER: US 60/122,487
NUMBER OF SEQ ID NOS: 36681
SOFTWARE: Patent.pm
SEQ ID NO 3787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-613-105-2 (1-132) x US-09-513-999C-3787 (1-515)
                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: sig_peptide
LOCATION: 57.146
OTHER INDORMATION: score 9.9
OTHER INFORMATION: seq_LEGFTLVSGTGA/EK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Lys --- SerCysValSerPro 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Dumas Milne Edwards, J.B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 41, Application US/10000489;
Patent No. 6794363;
GENERAL INFORMATION: Stephane
APPLICANT: Benjanin, Stephane
APPLICANT: Tanaka, Hiroaki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8.04e-09
165.50
45.67%
34.65%
                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
NAME/KEY: CDS
LOCATION: 57..428
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-513-999C-3787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 8
US-10-000-489-41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ŝ
```

```
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            478
9 9 55
25
5
273 TGCTGTGAAGGCTCTTGCGGGATGGCCTGTTTCGTTCCC 311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-613-105-2 (1-132) x US-09-023-655-1233 (1-478)
                                                                              Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY AGENT INFORMATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERRUCE/DOCKET NUMBER: PA-0001 US
TELECOMMUNICATION INFORMATION:
TELERAX: (650) 855-0155
INFORMATION FOR SEQ ID NO: 1233:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/023,655
FILING DATE: HEREWITH
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 63 GAGGCAGCTGTCACGGGA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.74e-07
152.50
41.48%
34.81%
20.01%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 478 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IMMEDIATE SOURCE:
LIBRARY: GENBANK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; CLONE: 928711
US-09-023-655-1233
                                                                                                                                                                                                                                                                                                                                          COUNTRY: USA
                                                                       US-09-023-655-1233
                                                                                                                                                                                                                                                                                                                                                          94304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match:
                                                        RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97 LeuMetLeuAsnProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLys 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                213 GCCATGITGAAICCICCIAACGGCIGCITGAAAGAIACIGACIGCCCAGGAAICAAGAAG 272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          93 CAAGATCCCGTTAAAGGACAAGTTTCAGTTAAAGGTCAAGATAAAGTCAAAAGCGCAAGAG 152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  33 rereacedeagriceterranaggicandacecreteranaggeceretrecateda 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           77 ASPIhrProAsnProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCys 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CysProGly------LysLysArgCysCysProAspThrCysGlyIleLysCys 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       117 CysCysMetGlyMetCysGlyLysSerCysValSerPro 129
                                                                                                                                                                                         CITY: Boston
STATE: Massachusetts
COUNTRY: U.S.A.
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 50Z or 55SX
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
SOFTWARE: Wordberfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/322,742
                                 Sequence 11, Application US/08322742
Patent No. 5688641
GENERAL INFORMATION:
APPLICANT: Sager, Ruth
TITLE OF INVENTION: CANCER DIAGNOSIS AND THERAPY
NUMBER OF SEQUENCES: 19
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-613-105-2 (1-132) x US-08-322-742-11 (1-321)
                                                                                                                                                                                                                                                                                                                                                                                    PRICE AND DATE:
PRICE APPLICATION NOMBER: 05/06/522,/42
PRICE APPLICATION DATA:
APPLICATION NUMBER: 07/938,823
FILING DATE: September 1, 1992
APPLICATION NUMBER: 07/844,296
FILING DATE: February 28, 1992
APPLICATION NUMBER: 07/522,216
FILING DATE: February 28, 1991
ATTORNEY/ABRIT INFORMATION:
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 0630/048003
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION 1542-8906
TELEFRAX: 0617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     73 LeuAspProVal------
                                                                                                                                                             E: Fish & Richardson
225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ..25e-08
156.00
39.78%
35.48%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; TOPOLOGY: linear
US-08-322-742-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 321
                                                                                                                                                             ADDRESSEE:
STREET: 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores:
RESULT 9
US-08-322-742-11
```

g

ò

ò

원 ò 유 ઠે

```
95 TCAAGACACTGTCAAAGG------CCGTGTTCCATTCAATGGACAAGATCCGT 142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAla--- 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 ATGAGGCCAGCAGCTTCTTGATCGTGGTGTGTTCCTCATCGCTGGGACGCTGTTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerAlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrp-GlnCysProGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20 ProTrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProLysLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -------GTTCCTGTTAAGG-
THE DETECTION OF BLOOD CELL GENE
```

us-10-613-105-2.rni

ઠે g ઠે q δ ద ò g

```
375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  76 --- GCTGTGGGAAGGAGTTAAAGAGGGTATAGAGAAAGCAGGGGTTTGC---CCAGCTGAC 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ----GTGAACATTAACTTTCCCCAGCTCGGCCTCTGTCGGGAC 315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21 TrpAlaValGluGlySerGlyLyBSerPhe---Ly8AlaGlyValCy8ProProLy8Ly8 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LysLysargCysCysProAspThrCysGlylleLysCysLeuAspProValAspThrPro 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19 ArigogoriccAgcagerrerrogreerecreariererrerrerrorrogade --- 75
                                                            316 CAGTGCCAGGTGGACAGCCAGTGTCCTGGCCAGATGAAATGCTGCCGCAATGGCTGTGGG
                                      105 ---CysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGlyMetCysGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerAlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGly
                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: Ni, et al.
TITLE OF INVENTION: Human Serine Protease and Serpin Polypeptides
TITLE OF INVENTION: Human Serine Protease and Serpin Polypeptides
FILE REFERENCE: PF391
CURRENT APPLICATION NUMBER: US/09/244,111
CURRENT APPLICATION NUMBER: 05/073,961
EARLIER APPLICATION NUMBER: 06/073,961
EARLIER FILING DATE: 1998-02-06
NUMBER OF SEQ ID NOS: 13
SOFTWARE: Patentin Ver. 2.0
SSQ ID NO 11
LENGTH: 478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          478
38
34
7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DIAGNOSIS AND THERAPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    244 AACTGAAGAAGGAAGGAACAAGGATGAAGATGT 276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  80 AsnProThrArgArgLysProGly---LysCys 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-613-105-2 (1-132) x US-09-244-111-11 (1-478)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 14, Application US/08322742
Fatent No. 5688641
GENERAL INFORMATION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES: 19
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
                                                                                                                124 Lys --- SerCysValSerPro 129
                                                                                                                                      376 AAGGTGTCCTGTGTCACTCCC 396
                                                                                                                                                                                                        US-09-244-111-11
; Sequence 11, Application US/09244111
; Patent No. 6566498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.63e-07
149.50
54.95$
41.76$
19.62$
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; NAME/KEY: CDS
; LOCATION: (19)..(249)
US-09-244-111-11
  271 CCCCAG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-322-742-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ٦
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              . No. .
                                                          ୍ବ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a
                                        ઠે
                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      125 AAGACTGGCGTGTGCCCCGAGCTCCAGGCTGACCAGAACTGCACGAA----- 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                233 ccttctgctctctg-cccaatgar--------aaggatcctgc 270
                                                                                                                      188 AGAGCCAGTCAAAAGTCTCCACTAAGCCTGGCTCCTGCCCATTATCTTGATCCG 247
                                                                                                                                                                                                ProvalThrTyrGlyGlnCysLeuMetLeuAsnProProAsnPhe-------- 104
                                                            ---GITICAGITAAAGGICAAGATAAAGTCAAAGCGCA 187
                                                                                                                                                                          nCysLeuMetLeuAsnProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLe 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LysAlaGlyValCysProProLysSvSsrAlaGln---CysLeuArgTyrLysLysPro 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GlucysGlnSerAspTrpGlnCysProGlyLysLysArgCysCysProAspThrCysGly 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          70 IleLysCysieuAspProValAspThrProAsnProThrArgArgLysProGlyLysCys 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11 ValLeuLeuAlaLeuGlyThrLeuAlaProTrpAlaValGluGlySerGlyLysSerPhe 30
                                                                                                95
                      59 yLysLysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrPr
                                                                                                79 OASHProThrArg-----ArglysProGlyLysCysProValThrTyrGlyGl
                                                                                                                                                                                                                                                                                      308 GAAGTGCTGTGAAGGCTCTTGCGGGATGGCCTGTTTCGTTCCC 350
                                                                                                                                                                                                                                                      115 uLysCysMetGlyMetCysGlyLysSerCysValSerPro 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  453
14
44
44
7
                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Jobert, S.
APPLICANT: Glordano, J.Y.
TITLE OF INVENTION: ESTS and Encoded Human Proteins.
FILE REFERENCE: GENSET: 0.54PE.
CURRENT APPLICATION NUMBER: US/09/621,976
CURRENT FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 19335
SOFTWARE: Patent.pm
SEQ ID NO 1373
LENGTH: 453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-613-105-2 (1-132) x US-09-621-976-1373 (1-453)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: CLOS 12.277
LOCATION: 32..277
NAME/KEY: sig_peptide
LOCATION: 32..121
OTHER INFORMATION: Von Heijne matrix
OTHER INFORMATION: score 9.8999961853027
                                                                                                                                                                                                                                                                                                                                                              Sequence 1373, Application US/09621976 Patent No. 6639063 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Dumas Milne Edwards, J.B.
                                                            143 TAAAGGACAA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.37e-07
149.50
45.67%
34.65%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                    US-09-621-976-1373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-621-976-1373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                            95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
9
```

셤

ઠે

셤

ઠે

셤

ઠે

셤 ò

```
IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LIBRARY: GENBANK
CLONE: g190337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-016-434-1249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   247 CCCATTATCTTGATCCGGTGCGCCATGTTGAATCCTCCTAACCGCTGCTTGAAAGATACT 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ProvalThrTyrGlyGlnCysLeuMetLeuAsnProProAsnPheCysGluMetAspGly 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          110 GlnCysLysArgAspLeuLysCysCysMetGlyMetCysGlyLysSerCysValSerPro 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              307 GACTGCCCAGGAATCAAGAAGTGCTGTGAAGGCTCTTGCGGGATGGCCTGTTTCGTTCCT 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 70 IleLysCysLeuAspProValAspThrProAsnProThrArgArgLysProGlyLysCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Janice Au-Young
APPLICANT: Jeffrey J. Seilhamer
TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF SIGNALING
TITLE OF INVENTION: PATHWAY GENE EXPRESSION
NUMBER OF SOUTENES: 1490
CORRESPONDENCE ADDRESS:
ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
STREET: 3174 PORTER DRIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   571
28
5
25
2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
                                                                 ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 50Z or 55SX
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
SOFTWARE: WordPerfect (Version 5.1)
APPLICATION DATA:
APPLICATION NUMBER: US/08/322,742
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-613-105-2 (1-132) x US-08-322-742-14 (1-571)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           indels:
                                                                                                                                                                                                                                                                                                                                                                            NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 00530/048003
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-8906
TELEPK: 200154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps:
                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/938,823
FILING DATE: September 1, 1992
APPLICATION NUMBER: 07/644,296
FILING DATE: February 28, 1992
APPLICATION NUMBER: 07/552,216
FILING DATE: February 28, 1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1249, Application US/09016434
Patent No. 6500938
GENERAL INFORMATION:
 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   149.00
55.00%
46.67%
19.55%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           nucleic acid
EDNESS: double
                                 Massachusetts: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TOPOLOGY: linear
US-08-322-742-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS:
                  Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-016-434-1249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET:
CITY: PA
STATE: C
                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
```

```
1511 CGTTAAAGGACAA-------GTTTCAGTTAAAGGTCAAGATAAAGTCAAAGC 1555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1616 ccggrigicacchrigharicicicithaicgcrigithaaagaracrigicicaggaar 1675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1394 IGGCAGCTGAAGCAGAGGCTTACTGGGTATAAATGTGGGCTTGTTTTTTAACAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      41 AlaGlnCys-----LeuArgTyrLysLysProGluCysGlnSerAspTrp-GlnCysPr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               58 oGlyLygLysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspTh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     94 yGlnCysLeuMetLeuAsnProProAsnPheCysGluMetAspGlyGlnCysLysArgAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-304-051-15
US-08-304-051-15
Sequence 15, Application US/08304051
Patent No. 5633227
GENERAL INFORMATION:
APPLICANT: Muller, Daniel K.; Brownell, Elise; Delaria, Katherine A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        78 rProAsnProThrArg-----ArglysProGlyLyBCysProValThrTyrGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1676 caagaadricrigraadgererridedddaregeeridrirregried 1721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           114 pLeuLyscyscysMetGlyMetCysGlyLysSerCysValSerPro 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2309
38
13
52
13
COMPUTER TRADABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
CORREATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/016,434
FILLING DATE: HERBWITH
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-613-105-2 (1-132) x US-09-016-434-1249 (1-2309)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                 PA-0002 US
                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
CLASSIFICATION:
ATTORNEY AGENT INFORMATION:
NAME: Zeller, Karen J., 071
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-00
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 845-4166
INFORMATION FOR SEQ ID NO: 1249:
SEQUENCE CHARACTERISTICS:
LENGTH: 2309 base pairs
SEQUENCE CHARACTERISTICS:
LENGTH: 2309 base pairs
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.67e-06
149.00
43.97%
32.76%
```

```
CITY: West Haven
STATE: Connecticut
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ANTI-SENSE: NO FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    , NAME/KEY:
, NAME/KEY:
US-08-304-051-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PCT-US95-11445-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSerAlaGlnCysLeu 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12 GCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCTGCCCAGTGCAAA 71
TITLE OF INVENTION: Secretory Leukocyte Protease Inhibitor as an TITLE OF INVENTION: Inhibitor of Tryptase
NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS: ADDRESSE: Miles Inc. STREET: 400 Morgan Lane
CITY: West Haven
STATE: Connecticut
COUNTRY: USA
ZIP: O6516
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1,300 Kb storage
COMPUTER: Apple Macintosh
OPERATION SYSTEM: System 7.1
SOFFWARE: Word Perfect 3.0a
CURRENT APPLICATION DATA: NS/08/304,051
FILING DATE: 12-Sept-1994
CLASSIFICATION DATA: NO. 5633227e
ATTORNEY/AGENT INFORMATION:
NAME: William F: Gray
REGISTRATION NUMBER: 31018
REFERENCE/DOCKET NUMBER: MWH 322
TELEPHONE: (203) 937-2795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              \label{eq:name} \mbox{NAME/KEY:} \quad \mbox{Primer for Polymerase Chain Reaction used to make mutein $NAME/KEY:} \quad \mbox{of human $SLPI$.}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Sequence 16, Application US/08304051; Patent No. 5633227; Patent No. 5633227; GENERAL INFORMATION: GENERAL INFORMATION: APPLICANT: Muller, Daniel K.; Brownell, Elise; Delaria, Katherine A.; TITLE OF INVENTION: Secretory Leukocyte Protease Inhibitor as an TITLE OF INVENTION: Inhibitor of Tryptase; NUMBER OF SEQUENCES: 21; CORRESPONDENCE ADDRESS: 31

ADDRESSEE: Miles Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECTIE TYPE: Other nucleic Acid: synthetic HYPOTHETICAL: NO ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-613-105-2 (1-132) x US-08-304-051-15 (1-93)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     72 AGATACAAGAAACCTGAGTGC 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             45 ArgTyrLysLysProGluCys 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.76e-08
146.00
96.30%
96.30%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 E: Miles Inc.
400 Morgan Lane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ,
NAME/KEY:
US-08-304-051-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

```
25 GlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSerAlaGlnCysLeu 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12 eccreregaaagreerreaaageregagrererereceraagaarereceagreeaa 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Primer for Polymerase Chain Reaction used to make mutein of human {\it SLPI}.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 15, Application PC/TUS9511445
GENERAL INFORMATION:
APPLICANT: Muller, Daniel K.; Brownell, Elise; Delaria,
APPLICANT: Atherine A.
TITLE OF INVENTION: Secretory Leukocyte Protease
TITLE OF INVENTION: Inhibitor as an Inhibitor of Trypta;
NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bayer Corporation
STREET: '400 Morgan Lane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: West Haven
STATE: Connecticut
COUNTRY: USA
ZOUNTRY: 0516
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1,300 Kb storage
                                                                                                                     1,300 Kb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: MOLECULE TYPE: - Other nucleic Acid: synthetic uvportHETICAL: No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-613-105-2 (1-132) x US-08-304-051-16 (1-93)
COMPUTER: CC.

ZIP: 06516
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1,30
COMPUTER: Apple Macintosh
OPERATING SYSTEM: System 7.1
SOFTWARE: Word Perfect 3.0a
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/304,051
FILING DATE: 12-Sept:1994
CLLASIFICATION S14
PRIOR APPLICATION DATA: NO. 5633227e
ATTORNEY/AGENT INFORMATION:
NAME: William F. Gray
REGISTRATION NUMBER: 31018
REFERENCE/DOCKET NUMBER: MWH 322
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION UNRORMATION:
TELECOMMUNICATION FOR SECTION OF S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 45 ArgTyrLysLysProGluCys 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   72 AGATACAAGAAACCTGAGTGC 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8.76e-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 146.00
96.30%
96.30%
19.16%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 93 bases
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
```

```
11 September 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              USA
                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 22202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PCT-US95-11445-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                             ANTI-SENSE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STATE: V.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-379-437-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12 GGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCTAAGAAATCTGCCCAGTGCAGA 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25 GlySerGlyLysSerPheLysAlaGlyValCysProProLysIysSerAlaGlnCysLeu 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 16, Application PC/TUS9511445

Sequence 16, Application PC/TUS9511445

GENERAL INFORMATION:
APPLICANT: Muller, Daniel K.; Brownell, Elise; Delaria,
APPLICANT: Katherine A.
TITLE OF INVENTION: Secretory Leukocyte Protease
TITLE OF INVENTION: Inhibitor as an Inhibitor of Tryptase
NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bayer Corporation
STREET: 400 Morgan Lane
CITY: West Haven
STATE: Connecticut
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: Primer for Polymerase Chain Reaction used to NAME/KEY: make mutein of human SLPI. PCT-US95-11445-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1,300 Kb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: Other nucleic Acid: synthetic HYPOTHETICAL: No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-613-105-2 (1-132) x PCT-US95-11445-15 (1-93)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels:
COMPUTER: Apple Macintosh
SOFTWARE: Word Perfect 3.0a
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/11445
FILING DATE: 11 September 1995
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
FILING DATE: 12 SEPTEMBER 1994
ATTORNEY AGENT INFORMATION:
NAME: William F. Gray
REGISTRATION NUMBER: 31018
REGISTRATION NUMBER: 31018
REGISTRATION INFORMATION:
TELEPHONE: (203) 937-2712
TELEPHONE: (203) 937-5492
INFORMATION FOR SEG ID NO: 15:
SEQUENCE CHARACTERISTICS:
LENGTH. 93 bases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 06516
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1,
COMPUTER: Apple Macintosh
OPERATING SYSTEM: System 7.1
SOFTWARE: Word Perfect 3.0a
CURRENT APPLICATION NATA:
APPLICATION NUMBER: PCT/US95/11445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               45 ArgTyrLysLysProGluCys 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGATACAAGAAACCTGAGTGC 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8.76e-08
146.00
96.30%
96.30%
                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ANTI-SENSE: NO FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PCT-US95-11445-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
```

```
25 GlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSerAlaGlnCysLeu 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12 GGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCTGCCCAGTGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: ISHIMA, YOSHIAKI
APPLICANT: OKAMA, NOBLYUKI
APPLICANT: VOSHIDA, MASAYA
APPLICANT: ANGAYA, SAKAB
APPLICANT: ANGAYA, SAKAB
APPLICANT: KAJI, AKIRA
TITLE OF INVENTION: NOVEL ELAFIN DERIVATIVE
NUMBER OF SEQUENCES: 16
CORRESPONDENCE ADDRESS:
ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT
STREET: 1755 & JEFFERSON DAVIS HWY, SUITE 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: Primer for Polymerase Chain Reaction used NAME/KEY: make mutein of human SLPI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       00100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPPRATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
FILING DATE: 27-MAR.1995
CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE: - Other nucleic Acid: synthetic HYPOTHETICAL: No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-613-105-2 (1-132) x PCT-US95-11445-16 (1-93)
PRIOR PAPLICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/304,051
FILING DATE: 12 SEPTEMBER 1994
ATTORNEY/AGENT INFORMATION:
NAME: William F. Gray
REGISTRATION NUMBER: 31018
REFERENCE/DOCKET NUMBER: MWH 322P1
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION 100 937-5492
INFORMATION FOR SEQ ID NO: 16:
SEQUENCE CHARACTER/STICS:
LENGTH: 93 bases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           45 ArgTyrLysLysProGluCys 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      72 AGATACAAGAAACCTGAGTGC 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 3, Application US/08379437; Patent No. 5734014
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8.76e-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         146.00
96.30%
96.30%
19.16%
                                                                                                                                                                                                                                                                                                                 TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
```

```
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                             US-09-016-434-673
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                         LIBRARY:
                                                                                                                                                                                                                                                                                                                                                                                              CLONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          94 GlyGlnCysLeuMetLeuAsnProProAsnPheCysGluMetAspGlyGlnCysLysArg 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 Arccecricicerrrecrichadececicandecerrercanamenearerecreser 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     :::|||||||
7 GAACCAGTTAAAGGTCCGGTGTCGACC-----AAACCGGGCTCTTGCCCGATTATCCTG 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          74 AspProValAspThrProAsnProThrArgArgLysProGlyLysCysProValThrTyr 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Janice Au-Young
APPLICANT: Janice Au-Young
APPLICANT: Jeffrey J. Seilhamer
TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF SIGNALING
TITLE OF INVENTION: PATHWAY GENE EXPRESSION
NUMBER OF SEQUENCES: 1490
CORRESPONDENCE ADDRESS:
ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
STREET: PALO ALTO
STATE: PALO ALTO
STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        114 AspleulysCysCysMetGlyMetCysGlyLysSerCysValSerPro 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 ATCAAAAATGCTGCGAAGGTTCTTGCGGTATGGCATGCTTCGTTCCG 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        177
26
5
23
2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-613-105-2 (1-132) x US-08-379-437-3 (1-177)
APPLICATION NUMBER: JP PCT/JP93/01133
FILING DATE: 11-AUG-1992
FILING DATE: 11-AUG-1992
APPLICATION DATA:
APPLICATION NUMBER: JP 234085/1992
FILING DATE: 11-AUG-1992
ATTORNEY/AGENT INFORMATION:
NAME: OBLON, NORMAN F
REGISTRATION NUMBER: 24,618
TELECOMMUNICATION INFORMATION:
TELEFAX: 703-413-3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels:
                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: other nucleic acid
DESCRIPTION: /desc = "synthetic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US/09/016,434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 673, Application US/09016434
Patent No. 6500938
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             140.00
55.36%
46.43%
18.37%
                                                                                                                                                                                                                                                                                         LENGTH: 177 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: U FILING DATE: HEREWITH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 94304
                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-016-434-673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-379-437-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            . No. .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
```

```
62 ---ecreregaaggagttaaagagggaatagagaaagcagggttrgc---ccagcrgac 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21 TrpAlaValGluGlySerGlyLysSerPhe---LysAlaGlyValCysProProLysLys 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerAlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LysLysArgCysCysProAspThrCysGlyIleLysCysLeuAspProVal 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 5, Application US/08379437
; Sequence 5, Application US/08379437
; Patent No. 5734048;
GAPELICANT: ISHIMA, YOSHIAKI
APPLICANT: OKAWA, NORITUKI
APPLICANT: AVORITUKI
APPLICANT: AVORITUKI
APPLICANT: AVORITUKI
APPLICANT: ANGRAYA, SAKAE
APPLICANT: AMIRA
TITLE OF INVENTION:
NUMBER OF SEQUENCES: 16
CORRESPONDENCE ADDRESS:
ADDRESSEE: OBLOW, SPIVAK, MCCLELLAND, MAIER & NEUS
STREET: 1755 S. JEFFERSON DAVIS HWY, SUITE 400
CITY: ARLINGTON
STATE: ANA
COUNTRY: USA
ZIP-
                                                                                                                                                                                                                                                                                                                                                                                                                                                    234
111
30
4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-613-105-2 (1-132) x US-09-016-434-673 (1-234)
                                                     CLASSIFICATION:
ATTORNEY AGENT INFORMATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/FOCKET NUMBER: PA-0002 US
TELEPHONE: (650) 855-0555
TELEPHONE: (650) 855-0556
INFORMATION FOR SEQ ID NO: 673:
SEQUENCE CHARACTERISTICS:
                                                                                                                                    as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         55.84%
41.56%
18.37%
                                                                                                                                                                                                                                                  LENGTH: 234 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                  : LUNGTUT09
2657496
                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
```

```
linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JS-08-379-437-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  red. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               94 GlyGlnCysLeuMetLeuAsnProProAsnPheCysGluMetAspGlyGlnCysLysArg 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      74 AspProvalAspThrProAsnProThrArgArgLysProGlyLysCysProValThrTyr 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             114 AspLeulysCysCysMetGlyMetCysGlyLysSerCysValSerPro 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 ATCAAAAAİGCIGCGAAGGITCTIGCGGIATGGCAİGCITCGITÜĞ 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT STREET: 1755 S. JEFFERSON DAVIS HWY, SUITE 400 CITY: ARLINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    177
26
5
23
1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 7, Application US/08379437

Patent No. 5734014

GENERAL INFORMATION:
APPLICANT: ISHIMA, YOSHIAKI
APPLICANT: YOSHIDA, MASAYA
APPLICANT: YOSHIDA, MASAYA
APPLICANT: KAJI, AKIRA
ITILE OF INVENTION: NOVEL ELAFIN DERIVATIVE
INTILE OF INVENTION: NOVEL
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-613-105-2 (1-132) x US-08-379-437-5 (1-177)
            APPLICATION NUMBER: US/08/379,437
FILING DATE: 27-MAR-1995
CLASSIFICATION: 530
PILLASSIFICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: JP PCT/JP93/01133
FILING DATE: 11-AUG-1992
APPLICATION NUMBER: JP 234085/1992
FILING DATE: 11-AUG-1992
ATTORNEY/AGENT INFORMATION:
NAME: OBLON, NORMAN F
REGISTRATION NUMBER: 24,618
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION 1NFORMATION:
TELECOMMUNICATION 1NFORMATION:
TELECOMMUNICATION 1NFORMATION:
TELECOMMUNICATION 1NFORMATION:
TELECOMMUNICATION 1NFORMATION:
TELECOMMUNICATION 1NFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linear
MOLECULE TYPE: other nucleic acid
DESCRIPTION: /desc = "synthetic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       139.00
55.36%
46.43%
18.24%
                                                                                                                                                                                                                                                                                                            TELEX: 248855 OPT UR
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 177 base pairs
                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 177 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
CURRENT APPLICATION DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
US-08-379-437-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 22
US-08-379-437-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
```

```
94 GlyGlnCysLeuMetLeuAsnProProAsnPheCysGluMetAspGlyGlnCysLysArg 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    74 AspProvalAspThrProAsnProThrArgArgLysProGlyLysCysProvalThrTyr 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: MASUDA, KENICHI
APPLICANT: OKADA, MASHIRO
APPLICANT: OKADA, MASHIRO
APPLICANT: OHTSUKA, EIKO
APPLICANT: IMAIZUMI, ATSUSHI
APPLICANT: WATANNBE, KUNIHITO
APPLICANT: WATSUWOYO, YOHICHI
APPLICANT: TAKEUCHI, AKIKO
APPLICANT: TAKEUCHI, AKIKO
APPLICANT: TAKEUCHI, AKIKO
APPLICANT: TAKEUCHI, AKIKO
APPLICANT: TAKEUCHI, AKIKO
APPLICANT: TAKEUCHI, AKIKO
APPLICANT: TAKEUCHI, AKIKO
APPLICANT: TAKEUCHI, AKIKO
APPLICANT: TECHOLOGI SER PRODUCTION THEREOF BY RECOMBINANT GENE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   114 AspleulysCysCysMetGlyMetCysGlyLysSerCysValSerPro 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 ATCAAAAATGCTGCGAAGGTTCTTGCGGTATGGCATGCTTCGTTCCG 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     177
26
5
23
1
COMPUTER: IBM PC comparation operating system: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/379,437 FILING DATE: 27-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                          PELLING DATE: 27-MAK-1...
FILING DATE: 27-MAK-1...
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP PCT/JP93/01133
FILING DATE: 11-AUG-1992
FILING DATE: 11-AUG-1992
FILING DATE: 11-AUG-1992
ATTORNEY/AGENT INFORMATION:
NAME: OBLON, NORMAN F
REGISTRATION NUMBER: 24,618
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-613-105-2 (1-132) x US-08-379-437-7 (1-177)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: other nucleic acid
DESCRIPTION: /desc = "synthetic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-07-963-538B-34/c
; Sequence 34, Application US/07963538B
; Patent No. 5851983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: SUGIYAMA, TAKASHI
APPLICANT: KAMIMURA, TAKASHI
APPLICANT: MASUDA, KENICHI
APPLICANT: OKADA, MASAHIRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.19e-06
139.00
55.36%
46.43%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 177 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEX: 248855 OPAT UR INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
```

```
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; Sequence 19119, Application US/09621976
; Patent No. 6639063
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.24e-05
133.50
32.20%
24.86%
17.52%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421 ĠĠĊCTCŤĠŤ-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 25
US-09-621-976-19119
                                                                                                                                                                                                                                                                                                                                                                                                          , ORGANISM: Mouse
US-09-724-864-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     82
                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC_COMPATIBLE
OPERATING SYSTEM: PC_DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/963,538B
FILING DATE: 20-OT-1992
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/484,483
FILING DATE: 22-AUG-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/408,483
FILING DATE: 12-AUG-1999
PRIOR APPLICATION DATA:
APPLICATION NUMBER: UP 4-212399
FILING DATE: 17-AUL-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: UP 62-330219
FILING DATE: 17-AUL-1992
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: UP 62-330219
FILING DATE: 24-DEC-1991
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: UP 62-330219
FILING DATE: 24-DEC-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: UP 62-330219
FILING DATE: 28-DEC-1997
ATTORNEY/AGENT INFORMATION:
TELECHOME. TELNG DATA:
TELECOMMUTICATION INFORMATION:
TELECHOME. TELNG DATA:
TELECOMMUTICATION INFORMATION:
TELECHOME. TELNG DATA:
TELECOMMUTICATION INFORMATION:
TELECHOME. TELNG DATA:
TELECOMMUTICATION INFORMATION:
TELECHOME. TELNG DATA:
TELECOMMUTICATION INFORMATION:
TELECHOME. TELNG DATA:
TELE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        000078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JS-10-613-105-2 (1-132) x US-07-963-538B-34 (1-68)
NUMBER OF SEQUENCES: 36
CORRESPONDENCE ADDRESS:
ADDRESSEE: COCLEY GODWARD LLP
STREET: FIVE PALO ALTO SQUARE, 4TH FLOOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 24
US-09-724-864-23
; Sequence 23, Application US/09724864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: nucleic acid
STRANDEDNESS: single stranded
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: DNA (synthetic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.07e-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             134.00
100.00%
100.00%
17.59%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEX: 380816 COOLEY PA
INFORMATION FOR SEQ ID NO: 3
SEQUENCE CHARACTERISTICS:
LENGTH: 68 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CyaMet 119
                                                                                                       PALO ALTO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-07-963-538B-34
                                                                                                                               STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match:
```

셤 ð

δ

```
181 recreccasecesecrecascrerererecrecrecensecratesacesasesassass 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -----GAGGACCAGTGTCAGGTGACAGCCAGTGTTCTGGC 465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           133 Tergrarge------eagrécactringacaagaactérecegacaaccecaag 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241 CTCTCAGGGACAGATACTAAACTCTCAGAGACTGGGACTACTACTCAATCAGCGGGCCTT 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301 GACCACATATAAACCACCGGGAGGTCAAGTCTCCACGAAGCCACCGGCTGTGACCAGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361 GAAGGCTTAGGTGTCCGAGAAAAGCAGGGCACCTGCCCAGCGTGGACATACCCAAGCTC 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94 GlyGlnCysLeuMetLeuAsnProProAsnPheCysGluMetAspGlyGlnCysLysArg 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24 GlugiySerGlyLyBSerPheLyBAlaGlyValCyBProPro---LyBLyBSerAlaGln 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    43 CysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLysLysArg 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -----ThraigArgLysProGlyLysCysProValThr-----Tyr 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16 crerecrisersecescersecerecriaerasserrecrarererecececearereasec 75
GENERAL INFORMATION:
APPLICANT: Wateson, James D.
APPLICANT: Wateson, James D.
APPLICANT: Murison, James D.
TITLE OF INVENTION: Polynucleotides and methods for their use.
TITLE OF INVENTION: by the polynucleotides and methods for their use.
FILE REFERENCE: 11000.1050/11.28
CURRENT FILING DATE: 2000-11.28
PRIOR PRICATION NUMBER: U.S. No. 6380362 60/171,678
PRIOR PLING DATE: 1995-12.23
NUMBER OF SEQ ID NOS: 72
SOFTWARE: PastSEQ for Windows Version 4.0
SEQ ID NO 23
LENGTH: 724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -----AlaProTrpAlaVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         114 AspLeuLysCysCysMetGlyMetCysGlyLys---SerCysValSerPro 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  63 CysCysProAspThrCysGlyIleLysCysLeuAspPro------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                724
44
113
53
67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-613-105-2 (1-132) x US-09-724-864-23 (1-724)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LeuValleuLeuAlaLeuGlyThrieu-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Dumas Milne Edwards,
APPLICANT: Jobert, S.
APPLICANT: Giordano, J.Y.
```

```
95 GlnCysLeuMetLeuAsnProProAsnPheCysGluMetAspGlyGlnCysLysArgAsp 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 CAGTGTCTGATGCTGAACCCGCCGAACTTCTGTGAAATGGACGGTCAGTGAAACGAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Daniel K.; Brownell, Elise; Delaria, Katherine A. Secretory Leukcyte Protease Inhibitor as an Inhibitor of Tryptase
                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Elem PC compatible
COMPUTER: Elem PC compatible
COMPUTER: Elem PC compatible
COMPUTER: Elem PC compatible
COMPUTER: Elem PC compatible
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/963,538B
FILING DATE: 20-0CT-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/843,359
FILING DATE: 25-FEB-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/408,483
FILING DATE: 12-AUG-1999
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/408,483
FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/408,483
FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/408,483
FILING DATE: 17-JUL-1992
PRIOR APPLICATION NUMBER: US 07/408,483
FILING DATE: 24-DEC-1991
PRIOR APPLICATION NUMBER: US 07/408,483
FILING DATE: 24-DEC-1991
PRIOR APPLICATION NUMBER: US 07/408,483
FILING DATE: 28-DEC-1991
PRIOR APPLICATION NUMBER: US 07/408,483
FILING DATE: 28-DEC-1991
PRIOR APPLICATION NUMBER: US 07/408,483
FILING DATE: 28-DEC-1991
PRIOR APPLICATION NUMBER: US 07/408,483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   00000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-613-105-2 (1-132) x US-07-963-538B-33 (1-67)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30,092
ER: TEJN-005/02US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: NEELEY PH.D., RICHARD L. REGISTRATION NUMBER: 30,092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nucleic acid
EDNESS: single stranded
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 7, Application US/08304051; Patent No. 5633227; GENERAL INFORMATION: APPLICANT: Muller, Daniel K.; B.; TITLE OF INVENTION: Secretory Lot TITLE OF INVENTION: Inhibitor or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE: DNA (synthetic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-843-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.55e-06
129.00
100.00$
100.00$
16.93$
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEX: 380816 COOLEY PA
INFORMATION FOR SEQ ID NO: 3
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 67 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         415-857-0663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               115 LeuLys 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                          COUNTRY: USA
ZIP: 94306-2155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGAAA 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: nucleic
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-07-963-538B-33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JS-08-304-051-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       159 ATCTGCCGAGACATTCCTAAGGACGGATTTCGCTCTTGTTGCTCAGACTAGAATGCAGTG 218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               279 CCTCCCAAGTAGCTGGGATTTACAGGGAGGAAA---AGAGATTGCCCTAGGGTTATTCGG 335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         93 TyrGlyGlnCygLeuMetLeuAsnProProAsnPheCysGluMetAspGlyGlnCysLys 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               336 AAACAATCCTGTTTG------AAAAGGTGCATCACTGATGAGACATGCA 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99 ricicaigegearganteriericegergaacagaagricinicaecaaagricinida 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           219 GCGTGATCTCGGCTCACCGCAACCTCTGCCTCCGGGTTCAAGTGATTCTCCTGCCTCAG 278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81 Pro------ValThr 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31 LysAlaGlyValCysProProLysLysSerAlaGlnCysLeuArgTyrLysLysProGlu 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    54 AAAGAGGGAGAATGCCCTCCCGATAAGAAC---CCATGC------AAAGAGCTG 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              51 CysGlnSerAspTrpGlnCysProGlyLysLysArgCysCysProAspThrCysGlyIle 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  77 ----- 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -----ThrProAsn 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: TAKEUCHI, AKIKO
TITLE OF INVENTION: ELASTASE INHIBITORY POLYPEPTIDE AND
TITLE OF INVENTION: PROCESS FOR PRODUCTION THEREOF BY RECOMBINANT GENE
TITLE OF INVENTION: TECHNOLOGY
NUMBER OF SEQUENCES: 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           113 ArgAspLeuLysCysCysMetGlyMetCysGlyLysSerCysValSerProVal 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: ESTs and Encoded Human Proteins
                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-613-105-2 (1-132) x US-09-621-976-19119 (1-449)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: COOLEY GODWARD LLP
STREET: FIVE PALO ALTO SQUARE, 4TH FLOOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               71 LysCysLeuAsp---ProValAsp-----
                 FILE REFERENCE: GENSET.054PR2
CURRENT APPLICATION NUMBER: US/09/621,976
CURRENT FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 19335
SOFTWARE: Patent.pm
SEQ ID NO 19119
LENGTH: 449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 33, Application US/07963538B Patent No. 5851983 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SUGIYAMA, TAKASHI
KAMIMURA, TAKASHI
MASUDA, KENICHI
OKADA, MASAHIRO
OHTSUKA, EIKO
IMAIZUMI, ATSUSHI
WATANABE, KUNIHITO
SUGA, TETSUYA
MATSUMOTO, YOHICHI
                                                                                                                                                                                                                                                                  4.43e-05
129.50
34.78%
29.71%
16.99%
                                                                                                                                                                          TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: PALO ALTO
                                                                                                                                                                                                                                                                                                                                           Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                  US-09-621-976-19119
                                                                                                                                                                                                                                                                                                                          Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-07-963-538B-33
                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 78
                                                                                                                                                                                                                                                                                    ..
No. .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
```

```
System 7.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: Apple Macintosh
OPERATING SYSTEM: System
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.54e-06
129.00
95.65%
95.65%
16.93%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      102 ProAsnPhe 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  72 CCCAATITC 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ANTI-SENSE: NO FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-304-051-11
COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  82 ThrArgArgLysProGlyLysCysProValThrTyrClyGlnCysLeuMetLeuAsnPro 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12 ACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTAGGATGCTTAACCCC 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; NAME/KEY: Primer for Polymerase Chain Reaction used to make mutein; NAME/KEY: of human SLPI.
US-08-304-051-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 11, Application US/08304051
Sequence 11, Application US/08304051
GENERAL INFORMATION:
TITLE OF INVENTION: Secretory Leukocyte Protease Inhibitor as an TITLE OF INVENTION: Inhibitor of Tryptase
NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
ADDRESSE: Miles Inc.
STREET: 400 Morgan Lane
CITY: West Haven
                                                                       STREESEE: MILES INC.
STREET: 400 MONGAIN Lane
CITY: West Haven
STREET: Connecticut
COUNTRY: USA
ZIP: 06516
COMPUTER: Diskette, 3.50 inch, 1,300 KD storage
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Diskette, 3.50 inch, 1,300 KD storage
COMPUTER: Diskette, 3.50 inch, 1,300 KD storage
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: - Other nucleic Acid: synthetic HYPOTHETICAL: No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-613-105-2 (1-132) x US-08-304-051-7 (1-80)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.54e-06
                     CORRESPONDENCE ADDRESS:
ADDRESSEE: Miles Inc.
STREET: 400 Morgan Lane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    129.00
95.65%
95.65%
16.93%
JUMBER OF SEQUENCES: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 nucleic acid
EDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        102 ProAsnPhe 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              72 cccaarric 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Connecticut
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS: Bir
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 80 bases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HYPOTHETICAL: NANTI-SENSE: NO PEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 28
US-08-304-051-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY:
STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
```

```
82 ThraigaiglysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsnPro 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: Primer for Polymerase Chain Reaction used to make mutein NAME/KEY: of human SLPI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 06516
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1,300 Kb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: 400 Morgan Lane
CITY: West Haven
STATE: Connecticut
COUNTRY: USA
COUNTRY: USA
COUNTRY: USA
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1,300 Kb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           001050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE:
MOLECULE TYPE:
- Other nucleic Acid: synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-613-105-2 (1-132) x US-08-304-051-11 (1-80)
                              COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
OPERATING SYSTEM: System 7.1
SOFTWARE: Word Perfect 3.0a
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/304,051
FILING DATE: 12-Sept-1994
CLASSIFICATION: 514
PRIOR APPLICATION DATA: No. 5633227e
ATTORNEY/AGENT INFORMATION:
NAME: William F. Gray
REGISTRATION NUMBER: MWH 322
RELEPRONE/DOCKET NUMBER: MWH 322
RELEPRONES/COCKET NUMBER: MWH 322
TELEROMMUNICATION INFORMATION:
TELEROMMUNICATION INFORMATION:
TELEROMMUNICATION INFORMATION:
TELERAX: (203) 937-2795
TELERAX: (203) 937-2795
TELERAX: 221949 MILES UR
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHAAATERISTICS:
LENGTH: 80 bases
```

```
Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                          TOPOLOGY: 1: MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsnPro 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12 ACAAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTAGGATGCTTAACCCC 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 11, Application PC/TUS9511445

Sequence 11, Application PC/TUS9511445

GENERAL INFORMATION:
APPLICANT: Muller, Daniel K.; Brownell, Elise; Delaria, APPLICANT: Katherine A.
TITLE OF INVENTION: Secretory Leukocyte Protease
TITLE OF INVENTION: Inhibitor as an Inhibitor of Tryptase
NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bayer Corporation
STREET: 400 Morgan Lane
CITY: West Haven
STATE: Connecticut
COUNTRY: USA

ZIP: 06516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: Primer for Polymerase Chain Reaction used to NAME/KEY: make mutein of human SLPI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER REALBABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1,300 Kb storage COMPUTER: Apple Macintosh OPERATING SYSTEM: System 7.1
SOFTWARE: Word Perfect 3.0a
CURRENT APPLICATION DATA: APPLICATION NUMBER: PCT/US95/11445
FILING DATE: 11 September 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                            - Other nucleic Acid: synthetic
No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-613-105-2 (1-132) x PCT-US95-11445-7 (1-80)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indel8:
                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/304,051
FILING DATE: 12 SEPTEMBER 1994
ATTORNEY/AGENT INFORMATION:
NAME: William F. Gray
REGISTRATION UNDERS: 31018
REGISTRATION UNDERS: WHH 322P1
TELECOMMUNICATION INFORMATION:
TELEFAX: (203) 937-2712
TELEFAX: (203) 937-5492
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 80 bases
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: - Other nucleic Acid: 897
             CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/11445
FILING DATE: 11 September 1995
CLASSIFICATION:
SOFTWARE: Word Perfect 3.0a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.54e-06
129.00
95.65%
95.65%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   102 ProAsnPhe 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCCAATTTC 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HYPOTHETICAL: N
ANTI-SENSE: NO
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PCT-US95-11445-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PCT-US95-11445-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
```

```
APPLICANT: MASUDA, KENICHI
APPLICANT: OKADA, MASHIRO
APPLICANT: OKADA, MASHIRO
APPLICANT: OKADA, MASHIRO
APPLICANT: OKADA, MASHIRO
APPLICANT: MAIZUMI, AISUSHI
APPLICANT: SUGA, TETSUYA
APPLICANT: MATSUMOTO, YOHICHI
APPLICANT: TAKEUCHI, AKIKO
TITLE OF INVENTION: ELASTASE INHIBITORY POLYPEPTIDE AND
TITLE OF INVENTION: TECHNOLOGY
NUMBER OF SEQUENCES: 36
CORRESPONDENCE ADDRESS: 36
CORRESPONDENCE ADDRESS: 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ANTI-SENSE: NO
FEATURE:
NAME/KEY: Primer for Polymerase Chain Reaction used to
NAME/KEY: make mutein of human SLPI.
PCT-US95-11445-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   00100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: - Other nucleic Acid: synthetic HYPOTHETICAL: No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-613-105-2 (1-132) x PCT-US95-11445-11 (1-80)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: FIVE PALO ALTO SQUARE, 4TH FLOOR CITY: PALO ALTO SCHARE, 4TH FLOOR STREET: PALO ALTO SCHARE, ATH FLOOR STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indele:
PATONE STATE OF THE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-07-963-538B-32/c
; Sequence 32, Application US/07963538B
; Patent No. 5851983
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUGIYAMA, TAKASHI
KAMIMURA, TAKASHI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.54e-06
129.00
95.65%
95.65%
16.93%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 94306-2155
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatit
OPERATING SYSTEM: PC-DOS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         102 ProAsnPhe 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       72 CCCAATTTC 80
```

```
ELASTASE INHIBITORY POLYPEPTIDE AND PROCESS FOR PRODUCTION THEREOF BY RECOMBINANT GENE TECHNOLOGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       74 AspProvalAspThrProAsnProThrArgArgLysProGlyLysCysProValThrTyr
                     TITLE OF INVENTION: ELASTASE INHIBITORY POLYPEPTIDE
TITLE OF INVENTION: PROCESS FOR PRODUCTION THEREOF B
TITLE OF INVENTION: TECHNOLOGY
NUMBER OF SEQUENCES: 36
CORRESPONDENCE ADDRESS:
ADDRESSEE: COOLEY GODWARD LLP
STREET: FIVE PALO ALTO
STATE: GA
CUTY: PALO ALTO
STATE: GA
COUNTRY: USA
ZIP: 94306-2155
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATEMENT Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/963,538B
FILING DATE: 25-0-0T-1992
CLASSIPICATION STATE:
APPLICATION NUMBER: US 07/408,483
FILING DATE: 22-AUG-1999
PRICK APPLICATION NUMBER: US 07/408,483
FILING DATE: 22-AUG-1999
PRICK APPLICATION NUMBER: US 07/408,483
FILING DATE: 17-JUL-1992
PRICK APPLICATION NUMBER: US 07/408,483
FILING DATE: 22-AUG-1999
PRICK APPLICATION NUMBER: US 07/408,483
FILING DATE: 17-JUL-1992
PRICK APPLICATION NUMBER: US 07/408,483
FILING DATE: 21-AUG-1992
PRICK APPLICATION NUMBER: US 07/408,483
FILING BATE: 21-AUG-1992
PRICK APPLICATION NUMBER: US 07/408,483
FILING BATE: US 07/408,483
FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-613-105-2 (1-132) x US-07-963-538B-31 (1-63)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: nucleic acid
STRANDEDNESS: single stranded
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (synthetic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.11e-05
124.00
100.00%
100.00%
16.27%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEX: 380816 COOLEY PA
INFORMATION FOR SEQ ID NO: 3
SEQUENCE CHARACTERISTICS:
LENGTH: 63 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 GGT 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94 Gly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-07-963-538B-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       76 ValAspThrProAsnProThrArgArgLysProGlyLysCysProValThrTyrGlyGln 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ß
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     64 GTCGACACCCCGAACCCGACGTAAACCGGGTAAATGTCCGGTTACATATGGTCAG
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/963,538B
FILING DATE: 20-OCT-1992
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/843,359
FILING DATE: 22-AUG-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/408,483
FILING DATE: 22-AUG-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: UP 4-212399
FILING DATE: 17-JUL-1992
PRIOR APPLICATION NUMBER: UP 4-212398
FILING DATE: 17-JUL-1992
PRIOR APPLICATION NUMBER: UP 3-35553
FILING DATE: 24-DEC-1991
PRIOR APPLICATION NUMBER: UP 62-330219
FILING DATE: 28-DEC-1991
PRIOR APPLICATION NUMBER: UP 62-330219
FILING DATE: 28-DEC-1997
APPLICATION NUMBER: UP 62-330219
FILING DATE: 28-DEC-1997
ATTORNEY/AGENT INFORMATION:
NAME: NEELEY PH.D., RICHARD L.
REGISTRATION NUMBER: 30,092
REPRENCE/DOCKET NUMBER: 30,092
REPRENCE/COCKET NUMBER: 30,092
REPRENCE/COCKET NUMBER: 30,092
REPRENCE/COCKET NUMBER: TEJN-005/02US
TELEFAX: 415-857-063
TELEFAX: 415-857-063
TELEFAX: 308086 COCLEY PA
INPORMATION FOR SEQ ID NO: 32:
SEQUENCE: THENTE: ACIDE CALEY
LENGTH: G6 base pairs
TUENTH: G1 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-613-105-2 (1-132) x US-07-963-538B-32 (1-66)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 31, Application US/07963538B; Patent No. 5851983; GENERAL INFORMATION:
APPLICANT: SUGIYAMA, TAKASHI
APPLICANT: KAMIMURA, TAKASHI
APPLICANT: OKADA, MASAHIRO
APPLICANT: OKADA, MASAHIRO
APPLICANT: OHTSUKA, EIKO
APPLICANT: IMAIZUMI, ATSUSHI
APPLICANT: SUGA, TETSUYA
APPLICANT: SUGA, TETSUYA
APPLICANT: ATSUSHI
APPLICANT: ATSUSHI
APPLICANT: ATSUSHI
APPLICANT: ATSUSHI
APPLICANT: ATSUSHI
APPLICANT: TAKEUCHI, AKIKO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: nucleic acid
STRANDEDNESS: single stranded
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA (synthetic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       125.00
100.00%
100.00%
16.40%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96 Cys 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4 TGT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 32
US-07-963-538B-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-07-963-538B-32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores:
Pred. No.:
```

엽

ઠે

g

```
US-10-613-105-2 (1-132) x US-08-304-051-13 (1-89)
                                                                                                                                                                COUNTER: User
ZIP: 06516
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1,3(
COMPUTER: Apple Macintosh
OPERATING SYSTEM: System 7.1
SOFTWARE: Word Perfect 3.0a
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/304,051
FILING DATE: 12-Sept-1994
CLASSIFICATION: 514
PRIOR APPLICATION DATA: NO. 563327e
ATTORNEY/AGENT INFORMATION:
NAME: William F. Gray
REGISTRATION NUMBER: MAH 322
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEFAX: 221949 MILES UR
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 89 bases
TWEET acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     44 LeuArgTyrLysLysProGluCys 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                66 CTTAGATACAAGAAACCTGAGTGC 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.79e-05
124.00
92.86%
92.86%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           400 Morgan Lane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                       CITY: West Haven
STATE: Connecticut
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE:
MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ANTI-SENSE: NO FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JS-08-304-051-13
                                                                                                                                                              COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9 GGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGT---CCTAAGAAATCTGCCCAGTGCAGA 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Primer for Polymerase Chain Reaction used to make mutein of human SLPI.
                                   Sequence 12, Application US/08104051
Patent No. 563327
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: Secretory Leukocyte Protease Inhibitor as an TITLE OF INVENTION: Inhibitor of Tryptase
NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
ADDRESSEE: Miles Inc.
STREET: 400 Morgan Lane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Muller, Daniel K.; Brownell, Elise; Delaria, Katherine A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSerAlaGlnCys-
                                                                                                                                                                                                                                                                                                                                                1,300 Kb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               - Other nucleic Acid: synthetic
No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-613-105-2 (1-132) x US-08-304-051-12 (1-89)
                                                                                                                                                                                                                                                                                       COUNTIT: USAL
ZIP: 06516
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1,30
COMPUTER: Apple Macintosh
OPERATING SYSTEM: System 7.1
SOFTWARE: WORD PErfect 3.0a
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/304,051
FILING DATE: 12-Sept-1994
CLASSIFICATION 5.14
PRIOR APPLICATION DATA: NO. 5633227e
ATTORNEY/AGENT INFORMATION:
NAME: William F. Gray
REGISTRATION NUMBER: 31018
REFERENCE/DOCKET NUMBER: 31018
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                44 LeuArgTyrLysLysProGluCys 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   66 crradaracaadaaaccrdagrdc 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 13, Application US/08304051; Patent No. 5633227; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.79e-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  124.00
92.86%
92.86%
16.27%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    nucleic acid
EDNESS: single
                                                                                                                                                                                                                                       CITY: West Haven
STATE: Connecticut
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE:
MOLECULE TYPE:
HYPOTHETICAL: NC
ANTI-SENSE: NO
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY:
NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 34
US-08-304-051-13
RESULT 33
US-08-304-051-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-304-051-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠ
```

```
9 GGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGT---CCTAAGAAATCTGCCCAGTGCAAG 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: Primer for Polymerase Chain Reaction used to make mutein NAME/KEY: of human SLPI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25 GlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSerAlaGlnCys-
TITLE OF INVENTION: Secretory Leukocyte Protease Inhibitor as an TITLE OF INVENTION: Inhibitor of Tryptase NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
ADDRESSEE: ALISE Inc.
STREET: 400 Morgan Lane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               pCT-US95-11445-12

Sequence 12, Application PC/TUS9511445

GENERAL INFORMATION:
APPLICANT: Muller, Daniel K.; Brownell, Elise; Delaria,
APPLICANT: Katharine A.
TITLE OF INVENTION: Secretory Leukocyte Protease
TITLE OF ENUMENTON: Inhibitor as an Inhibitor of Tryptase
NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bayer Corporation
                                                                                                                                                                                                                                                            1,300 Kb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  - Other nucleic Acid: synthetic
No
```

```
Diskette, 3.50 inch, 1,300 Kb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION

GENERAL INFORMATION

GENERAL INFORMATION

GENERAL INFORMATION:

APPLICANT: Rosen et al.

TITLE OF INVENTION: 28 Human Secreted Proteins

TITLE OF INVENTION: 28 Human Secreted Proteins

CURRENT APPLICATION NUMBER: US/09/152,060

CURRENT FILING DATE: 1998-09-11

SARLIER FILING DATE: 1998-03-12

ERRIER FILING DATE: 1998-03-12

SARLIER APPLICATION NUMBER: 60/040,762

SARLIER APPLICATION NUMBER: 60/040,710

EARLIER PILING DATE: 1997-03-14

SARLIER FILING DATE: 1997-03-14

SARLIER FILING DATE: 1997-03-16

ERRIER FILING DATE: 1997-03-16

SARLIER FILING DATE: 1997-05-30

ERRIER PILING DATE: 1997-05-30

ERRIER APPLICATION NUMBER: 60/048,100

SARLIER PILING DATE: 1997-05-30

ERRIER APPLICATION NUMBER: 60/048,100

SARLIER RELING DATE: 1997-05-30

ERRIER APPLICATION NUMBER: 60/048,357

ERRIER PILING DATE: 1997-05-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE: - Other nucleic Acid: synthetic HYPOTHETICAL: No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JS-10-613-105-2 (1-132) x PCT-US95-11445-13 (1-89)
                                  COMPAING SYSTEM: System 7.1
SOFTWARE: Word Perfect 3.0a
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/11445
FILING DATE: 11 September 1995
CLASSIFICATION DATA:
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: 08/304,051
FILING DATE: 12 SEPTEMBER 1994
ATTORNEY AGENT INFORMATION:
NAME: William F. Gray
                                                                                                                                                                                                                                                                                             REGISTRATION NUMBER: 31018
REPREBNCE/DOCKET NUMBER: MWH 322P1
RELECOMMUNICATION INFORMATION:
TELEPHONE: (203) 937-2712
TELERAX: (203) 937-5492
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             44 LeuArgTyrLysLysProGluCys 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         66 CTTAGATACAAGAACCTGAGTGC 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.79e-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         124.00
92.86%
92.86%
16.27%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: nucleic acid
STRANDEDNESS: single
                   COMPUTER: Apple Maci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HYPOTHETICAL:
ANTI-SENSE: N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PCT-US95-11445-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 37
US-09-152-060-34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9 decretegaaagrectreaaageregagrerer---eeraagaaarereceagreeaga 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25 GlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSerAlaGlnCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 13, Application PC/TUS9511445
GENERAL INFORMATION:
APPLICANT: Muller, Daniel K.; Brownell, Elise; Delaria,
APPLICANT: Katherine A.
TITLE OF INVENTION: Secretory Leukocyte Protease
TITLE OF INVENTION: Inhibitor as an Inhibitor of Tryptase
NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
ADDRESSE: Bayer Corporation
STREET: 400 Morgan Lane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: Primer for Polymerase Chain Reaction used to NAME/KEY: make mutein of human SLPI.

PCT-US95-11445-12
                                                                                                                1,300 Kb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          770078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear MoLECULE TYPE: MOLECULE TYPE: ACLECULE TYPE: - Other nucleic Acid: synthetic HYPOTHETICAL: No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-613-105-2 (1-132) x PCT-US95-11445-12 (1-89)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels:
                                                                                                                                                                                                                                                                  CLASSIFICATION:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/304,051
FILING DATE: 12 SEPTEMBER 1994
ATTORNEY/AGENT INFORMATION:
NAME: William F Gray
REGISTRATION NUMBER: 31018
REFERENCE/DOCKET NUMBER: MWH 322P1
TELECOMMUNICATION INFORMATION:
TELEPONE: (203) 937-2712
TELEPAX: (203) 937-5492
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERSTICS:
                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1,
COMPUTER: Apple Macintosh
OPERATING SYSTEM: System 7.1
SOFTWARE: Word Perfect 3.0a
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/11445
FILING DATE: 11 September 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  44 LeuArgTyrLysLysProGluCys 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                66 CTTAGATACAAGAAACCTGAGTGC 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.79e-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            124.00
92.86%
92.86%
16.27%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: West Haven
STATE: Connecticut
COUNTRY: USA
ZIP: 06516
                     Connecticut
USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 89 bases
CITY: West Haven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ANTI-SENSE: NO FEATURE:
                                                                    ZIP: 06516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 36
PCT-US95-11445-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                              COUNTRY:
```

```
9 GGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGT---CCTAAGAAATCTGCCCAGTGCAAG 65
                                                                                                                                                                                                                                                                                                            25 GlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSerAlaGlnCys
NAME/KEY: Primer for Polymerase Chain Reaction used to NAME/KEY: make mutein of human {\rm SLPI}.
                                                                                                               770078
```

```
ORGANISM: Drosophila melanogaster
                  ús-09-270-767-1693
                                                                                                                                                                                                                                                         37
                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match:
DB:
                                                                                 Score:
                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 313 TATGACAAGAAAGATAATACTTGCTCCATGTTGTCTATGGTGGCTGCCAGGGAAACAAT 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    193 CAGGACAACAAGAAGTGTTGTGTCTTCAGCTGCGGAAAAAAATGTTTAGATCTCAAACAA 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           373 AACAACTICCAAICCAAAGCCAACIGCCIGAACACCIGCAAGAAIAAACGCIIICCCIGA 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        107 MetAspGlyGlnCysLysArgAspLeuLysCysCysMetGlyMetCysGlyLysSerCys 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            73
                                                                                                                                                                                                                                                                                                                                                                                                                                                  21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysPro-----Pro 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            38 LysLysSerAlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCys 57
                                                                                                                                                                                                                                                                                                                                                                                         MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro 20
                                                                                                                                                                                                                                                                                                                                                                                                                      81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1693, Application US/09270767

Patent No. 6703491

GENERAL INFORMATION:

GENERAL INFORMATION:

TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster

FILE REFRENCE: File Reference: 7326-094

CURRENT APPLICANT: NUMBER: US/09/270,767

NUMBER OF SEQ ID NOS: 62517

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 1693

LENGTH: 472

TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             74 AspProValAspThrProAsnProThr------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ---ArgArgLysProGlyLysCysProVal---ThrTyrGlyGlnCys------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31 AreggarcricigaAcrirrgaGccrccrecrecrarrcgrecre-----rrages
                                                                                                                                                                                                                                                       753
47
14
58
58
10
                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                            US-10-613-105-2 (1-132) x US-09-152-060-34 (1-753)
EARLIER APPLICATION NUMBER: 60/048,189
EARLIER FILING DATE: 1997-05-30
EARLIER APPLICATION NUMBER: 60/057,765
EARLIER APPLICATION NUMBER: 60/048,970
EARLIER FILING DATE: 1997-09-05
EARLIER FILING DATE: 1997-06-06
EARLIER FILING DATE: 1997-06-06
EARLIER FILING DATE: 1997-12-19
NUMBER OF SEQ ID NOS: 118
SOFTWARE: PACENTIN VET: 2.0
SEQ ID NO 34
LENGTH: 753
                                                                                                                                                                                                                                                      0.00171
117.50
38.12%
29.38%
15.42%
                                                                                                                                                                                                ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 38
US-09-270-767-1693
                                                                                                                                                                                                                                           Alignment Scores:
                                                                                                                                                                                                              US-09-152-060-34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     83
                                                                                                                                                                                  TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97
                                                                                                                                                                                                                                                                                                                 Query Match:
DB:
                                                                                                                                                                                                                                                            ..
No..
                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
```

```
340 GATAACCTGGATGCCAACACCTGTGCCTACGAGTGCCGTACCGATGCCCATTGTGATGGA 399
                                                                                                                                                                                                                     220 éscricidababacabarcacagragargarcarcabáciracagagargaracráricira 279
                                                                                                                                                                                                                                                                                            280 GICCCCCCCTTIGCCTAGGAAGCCGGGACAGTGICCTIACCTGGITCCACCGGGTCCT 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      220 GECTICIGGAAAGGAATGCCGAGTGGTGGACGTGAGCTGCGAGGGTGAATACTGTCCTCCA 279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           280 GICCCCGCCTGTITGCCTAGGAAGCCGGGACAGTGTCCTTACCTGGTTCCACCGGGTCCT 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         49
                                                                                                                                                                                                                                                                                                                                59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ----SerPheLysAlaGlyValCysPro--- 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: Homburger et al.
TITLE OF INVENTION: Nucleic and proteins of Drosophila melanogaster.
TITLE OF INVENTION: Nucleic 3326-094
CURRENT APPLICATION NUMBER: US/09/270,767
CURRENT APPLICATION NUMBER: US/09/270,767
CURRENT PILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 16975
LENGTH: 472
                                                                                                                                                                                                                                                                                                                                -----AluCysGlnSerAspTrpGlnCysProGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              37 -----ProlyslysSerAlaGinCysLeuArgTyrLysLysPro----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ------GluCysGlnSerAspTrpGlnCysProGly
                                                                                                                                                                                                                                                           ----ProLysLysSerAlaGinCysLeuArgTyrLysLysPro----
                                                                                                                                                                                  25 GlyserGlyLys------SerPheLysAlaGlyValCysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100 GCCCGACGCTGTTGCTCCAATGGATGTGGCACCCAGTGTGTGGATCTT 447
                                                                                                                                                                                                                                                                                                                                                                                                         75
                                                                                                                                                                                                                                                                                                                                                                                                       60 LysLysArgCysCysProAspThrCysGlylleLysCysLeuAspPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  472
8 8
118
35
               472
25
8
18
25
3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-613-105-2 (1-132) x US-09-270-767-16975 (1-472)
                                                                                                                                            x US-09-270-767-1693 (1-472)
               Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 16975, Application US/09270767 Patent No. 6703491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; ORGANISM: Drosophila melanogaster US-09-270-767-16975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25 GlySerGlyLyg-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.00304
112.50
43.42%
32.89%
14.76%
           0.00304
112.50
43.42%
32.89%
14.76%
                                                                                                                                              US-10-613-105-2 (1-132)
                                              Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-270-767-16975
Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
Pred. No.:
```

```
GinCysLeuMetLeuAsnPro---ProAsnPheCysGluMetAspGlyGlnCysLysArg 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28 GTTGATCAATGCTCAGGAGATGGATCCTGCCTGGCAACATGAAGTGCTGTAGCAATAGC 187
-MetAspGlyGlnCysLysArgAspLeuLysCysCysMetGlyMetCysGlyLysSerCy 126
                                                                                               433 ATTGGATAAGGATGCACTGGAAGAACTGCCAGAATGT---GGCTCATGCTCTGAGTACTG 489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             188 rerigircargrerigeaaaerecrerigierrrraaarggrigaeageeaggaagargaeaa 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    248 TTCAATCTTCATAAACATGATGATGGCCAGCCCCCAGAAGATTTCTTCTGAATTCACAGA 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        108 GCCTGTGCTTGGCTACTTCCTAGCCCTAGAATTGCATTCTTGGAC------AAGGAA 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   71 GAATTTGAAAAACCTGGAGCTTGT---CCCAAGCCTTCACCAGAAAGTGTTGGAATTTGT 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ProAsnProThrArgArgLysProGlyLysCysProValThrTyr------Gly 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PheLeuVal --- LeuLeuAlaLeuGlyThrLeuAlaProTrpAlaValGluGlySerGly 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28 LysSerPhelysAlaGlyValCysProProLysLysSerAlaGlnCysLeuArgTyrLys 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              48 LysProGluCysGlnSerAspTrpGlnCysProGlyLysLysLysArgCysCysProAspThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AspieulysCysCysMetGlyMetCysGlyLysSerCysValSerPro 129
                                                                                                                                                                                                                                                                                                                                  APPLICANT: Sleeman, Matthew
APPLICANT: Sleeman, Matthew
APPLICANT: Abernethy, Nevin
APPLICANT: Mornethy, Nevin
APPLICANT: Kumble, Anand
APPLICANT: Kumble, Anand
APPLICANT: Wintson, Green
TITLE OF INVENTION: Compounds isolated from stromal cel
TITLE OF INVENTION: and methods for their use
FILE REPRENCE: 11000-1037c1
CURRENT APPLICATION NUMBER: US/09/383,586
CURRENT FILING DATE: 1999-08-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     437
39
15
61
21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CysGlyIleLysCysLeuAspProVal------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-613-105-2 (1-132) x US-09-383-586-29 (1-437)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS: 38
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 29
LENGTH: 437
TYPE: DNA
                                                                                                                                                                                                                                                                            Sequence 29, Application US/09383586 Patent No. 6242419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.00568
109.50
39.71%
28.68%
14.37%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Mouse US-09-383-586-29
                                                                                                                                               126 B 126
                                                                                                                                                                                          490 T 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores
                                                                                                                                                                                                                                                       US-09-383-586-29
                                                           101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                    셤
                                                                                                                                               ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                        ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ------LeuMetLeuAsnProPro-AsnPheCysGlu------------------------106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ---aargrccaggaccrggr----crgacrgarrcgrrarrrcccaggagargrccc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  caggacaacaagaagigijgigictrcaggiggaaaaaaaagigiiragarcicaaacaa 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  38 LysLysSerAlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCys 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31 ATGGGMTCTTCTGGACTTTTGAGCCTCCTGGTGCTATTCGTCCTC----TTAGCG--- 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysPro-----Pro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATGTATGCGAAATGCCAAAAGAAACTGGCCCCGCCCTGGCTTATTTTCTTCATTGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         58 ProGlyLysLysArgCysCysProAspThrCysGlyIleLysCysLeu-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ---ArgArgLysProGlyLysCysProVal---ThrTyrGlyGlnCys-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      783
47
15
57
57
10
                                                                                             THILE OF INVENTION:

PAPPLICANT: Rosen et al.

TITLE OF INVENTION: 28 Human Secreted Proteins
FILE REFERENCE: PEO03P1.03

CURRENT APPLICATION NUMBER: US/09/152,060

CURRENT PILING DATE: 1998-09-11

EARLIER FILING DATE: 1998-03-12

EARLIER FILING DATE: 1998-03-12

EARLIER FILING DATE: 1997-03-14

EARLIER FILING DATE: 1997-03-14

EARLIER PELICATION NUMBER: 60/40,710

EARLIER PILING DATE: 1997-03-30

EARLIER FILING DATE: 1997-03-04

EARLIER FILING DATE: 1997-05-30

EARLIER FILING DATE: 1997-05-30

EARLIER PLICATION NUMBER: 60/48,100

EARLIER PILING DATE: 1997-05-30

EARLIER PILING DATE: 1997-06-06

EARLIER PILING DATE: 1997-06-06

EARLIER PILING DATE: 1997-10-19

NUMBER: OF OF TO NOS: 118

SOOTWARE: PAPENTIN VONE: 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-613-105-2 (1-132) x US-09-152-060-50 (1-783)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AspProValAspThrProAsnProThr----
                                  Sequence 50, Application US/09152060 Patent No. 6448230 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           112.50
38.51%
29.19%
14.76%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ) ORGANISM: Homo sapiens
US-09-152-060-50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 50
LENGTH: 783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No.:
```

g

ઠે

셤

ሯ

g

ò

요

ઠ

8 ઠે

8

ò

```
90 Pro------ValThrTyrGlyGlnCysLeuMetLeuAsnProProAsnPheCys 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
                                                                                                                                                                                                                                                                                                                      CORTWARE: PACENTIN Release #1.0, Ver.
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/978,895
FILING DATE: 1992110
CLASSPICATION 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/44,406
FILING DATE: 01-DEC-1989
ATTORNEY AGENT INFORMATION:
NAME: PETYMEN, David G.
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
RERERENCE DOCKET NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
RESERVENCE DOCKET NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-028
REGISTRATION NUMBER: 1414-
                          ADDRESSEE: Suite 400
STREET: 133 Carnegie Way, N.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 4905 base pairs
TYPE: NUCLEIC ACID
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.186
109.00
32.32%
25.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDS
100..4125
CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear MOLECULE TYPE: CDNA
                                                                               CITY: Atlanta
STATE: Georgia
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
                                                                                                                                                              30303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ,
US-07-978-895-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USS-07-978-895-3
USS-07-978-895-3
Sequence 3, Application US/07978895
Parent No. 5480968
GENERAL INFORMATION:
APPLICANT: Kraus, Matchias H.
APPLICANT: AACONSON, Stuart A.
TITLE OF INVENTION: AN ISOLATED POLYPEPTIDE RELATED TO THE
TITLE OF INVENTION: EPIDERWAL GROWTH FACTOR RECEPTOR, ANTIGEN THERETO, AND
TITLE OF INVENTION: BIOASSAYS AND METHODS RELATED THERETO
NUMBER OF SEQUENCES: 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               188 TGTGGTCATGTCTGCAAAACTCCTGTCTTTAAATGGTTGACAGCCATGTGGAAGATGGA 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             248 TICAATCITCATAAACAIGAAIGAIGGCCAGCCCCAGAAGAITICITCIGAAITCACAGA 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    95 GlnCysLeuMetLeuAsnPro---ProAsnPheCysGluMetAspGlyGlnCysLysArg 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     71 GAATTTGAAAACCTGGAGCTTGT---CCCAAGCCTTCACCAGAAAGTGTTGGAATTTGT 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCCTGTGCTTGGCTACTTCCTAGCCCTAGAATTGCATTCTTGGAC-----AAGGAA 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28 LysSerPheLysAlaGlyValCysProProLysLysSerAlaGlnCysLeuArgTyrLys 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LysProGluCysGlnSerAspTrpGlnCysProGlyLysLysLysArgCysCysProAspThr 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -----AspThr 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ProAshProThrArgArgLysProGlyLysCysProValThrTyr------Gly 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PheLeuVal --- LeuLeuAlaLeuGlyThrLeuAlaProTrpAlaValGluGlySerGly 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    114 AspLeuLysCysCysMetGlyMetCysGlyLysSerCysValSerPro 129
                                                                                                                                                                                                                     APPLICANT: Onruet, Rene APPLICANT: Kumble, Anand APPLICANT: Kumble, Anand APPLICANT: Murison, Greg TITLE OF INVENTION: Compositions Isolated From Stromal Cells TITLE OF INVENTION: and Methods Por Their Use FILE REFERENCE: 11000.1037c3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             437
39
15
61
61
7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CysGlyIleLysCysLeuAspProVal------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-613-105-2 (1-132) x US-09-823-038A-29 (1-437)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/823,038A CURRENT FILING DATE: 2001-07-09 NUMBER OF SEQ ID NOS: 61 SOFWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps:
                                                 Sequence 29, Application US/09823038A
Patent No. 6797271
GENERAL INFORMATION:
APPLICANT: Streamen, Matthew
APPLICANT: Abernethy, Nevin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.00568
109.50
39.71%
28.68%
14.37%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-823-038A-29
                             US-09-823-038A-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
```

```
625 GTGAAGGACAATGGCAGAAGC------TGTCCCCCCCTGTCATGAGGTTTGC 669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 670 AAGGGGCGATGCTGGGTCCTGGATCAGAAGACTGCCAGACATTGACCAAGACCATCTGT 729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      850 GACAGIGGAGCCIGIGIACCICGCIGICCACAGCCICITIGICIACAACAAGCIAACIIIIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ---ProGluCysGlnSerAspTrpGlnCysProGlyLysLysArgCysCysProAspThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         --- LystysSerAlaGlnCysLeuArgTyrLysLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        68 CysGlylleLysCysLeuAspProValAspThr----------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23 ValGluGlySerGlyLysSerPheLysAlaGlyValCysProPro-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -----ProAsnPro---ThrArgArgLysProGly-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4905
41
12
43
68
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-613-105-2 (1-132) x US-07-978-895-3 (1-4905)
```

78

67

969

```
Sequence 3, Application US/08475352
Sequence 3, Application US/08475352
Patent No. 591675
GENERAL INFORMATION:
APPLICANT: Kraus, Matthias H.
APPLICANT: Aaronson, Stuart A.
TITLE OF INVENTION: AN ISOLATED POLYPEPTIDE RELATED TO THE
TITLE OF INVENTION: BIOASSAYS AND METHODS RELATED THERETO
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
ADDRESSEE: Suite 400
STREET: 133 Carnegie Way, N.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |||:::|||
|1030 GAAGTAGAT-----AAAAATGGGCTCAAGATGTGTGAGCCTTGTGGGGGACTATGT 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                      910 CAGCTGGAACCCAATCCCCACACCAAGTATGGAGGAGTTTGTGTAGCAGCTGT 969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          106 GlumetAspGlyGlnCysLysArgAspLeuLysCysCysMet-----GlyMetCys 122
  Pro------ValThrTyrGlyGlnCysLeuMetLeuAsnProProAsnPheCys 105
                                                                                                                                                                                                                                                                           850 GACAGTGGAGCCTGTGTACCTCGCTGTCCACAGCCTCTTGTCTACAACAAGCTAACTTTC 909
                                                                                                                                              49 ---ProGluCysGlnSerAspTrpGlnCysProGlyLysLysArgCysCysProAspThr 67
                                                                                                                                                                                                                                                                                                                                                                                                     ------ProAsnPro---ThrArgArgLysProGly------LysCys 89
                                                               570 AAGGGGCGATGCTGGGTCCTGGATCAGAAGACTGCCAGACATTGACCAAGACCATCTGT
                                                                                                                                                                                                                                   68 CysGlyIleLysCysLeuAspProValAspThr-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/475,352
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Perryman, David G.
REGISTRATION NUMBER: 33,438
REPERENCE/DOCKET NUMBER: 1414-028
TELECOMMUNICATION INFORMATION:
TELEPHONE: (404) 688-0770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: APPLICATION NUMBER: US 07/444,406
FILING DATE: 01-DEC-1989
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/978,895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1081 CCCAAAGCCTGT 1092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             123 GlyLysSerCys 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Georgia
: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Atlanta
STATE: Georgia
COUNTRY: U.S.A.
ZIP: 30303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JS-08-475-352-3
                                                               38
                                                                                                                                                                                                                                                                                                                                                                                                        79
                                                                                                                                                                                                                                                                                                                    78
                                                               δ
                                                                                                  g
                                                                                                                                              ò
                                                                                                                                                                                   요
                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: Kraus, Matthias H.
APPLICANT: Aaronson, Stuart A.
APPLICANT: Aaronson, Stuart A.
TITLE OF INVENTION: AN ISOLATED POLYPEPTIDE RELATED TO THE
TITLE OF INVENTION: BIDERNAL GROWTH FACTOR RECEPTOR, ANTIGEN THERETO
TITLE OF INVENTION: BIOASSAYS AND METHODS RELATED THERETO
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
ADDRESSEE: Suite 400
STREET: 133 Carnegie Way, N.W.
                                                                                       |||:::|||
|030 GAAGTAGAT------AAAAATGGGCTCAAGATGTGTGAGCCTTGTGGGGGACTATGT 1080
106 GluMetAspGlyGlnCysLysArgAspLeuLysCysCysMet-----GlyMetCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OPERATING SYSTEM: PC-DOS/MS-DOS
SOCTAMEN Belease #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/473,119
FILING DATE: 07-JUN-1995
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: 07/978,895
FILING DATE: 01-DEC-1992
APPLICATION NUMBER: US 07/444,406
FILING DATE: 01-DEC-1989
ATTORNEY/AGENT INFORMATION:
NAME: PETYMAN, DAVIG G.
REGISTRATION NUMBER: 1414-028
REFERENCE/DOCKET NUMBER: 1414-028
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEFAX: (404) 688-9880
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 4065 Dass Pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-613-105-2 (1-132) x US-08-473-119-3 (1-4905)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ndel8:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                         Sequence 3, Application US/08473119 Patent No. 5820859
                                                                                                                                                                          |||:::|||
1081 CCCAAAGCCTGT 1092
                                                                                                                                                123 GlyLysSerCys 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                109.00
32.32%
25.00%
14.30%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 30303
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          inear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Georgia
: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: Atlanta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                   RESULT 44
US-08-473-119-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-473-119-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score:
                                                                                                                                                                                     g
                                                                                                    셤
                                                                                                                                              ò
                                                               ઠે
```

23 ValGluGlySerGlyLysSerPheLysAlaGlyValCysProPro-----

```
|||:::|||
|1030 GAAGTAGAT-----AAAAATGGGCTCAAGATGTGTGAGCCTTGTGGGGACTATGT 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              910 CAGCTGGAACCCCAATCCCCAGTATCAGTATGGAGGAGTTTGTGTAGCCAGCTGT 969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          90 Pro------ValThrTyrGlyGlnCygLeuMetLeuAsnProProAsnPheCys 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                106 GluMetAspGlyGlnCysLysArgAspLeuLysCysCysMet------GlyMetCys 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |||::: :::||:::|||
625 GTGAAGGACAATGGCAGAAGC-----TGTCCCCCCTGTCATGAGGTTTGC 669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    790 réreccesescriécreascecéreassacas as particulas de 1990 rérecces de 1990 rérecces de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 respectation de 1990 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                850 GACAGTGGAGCCTGTGTACCTCGCTGTCCACAGCCTCTTGTCTACAACAAGCTAACTTTC 909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        670 AAGGGGCGATGCTGGGTCCTGGATCAGAAGACTGCCAGACATTGACCAAGACCATCTGT 729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             49 ---ProGluCysGlnSerAspTrpGlnCysProGlyLysLysArgCysCysProAspThr 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                68 CysGlyIleLysCysLeuAspProValAspThr-----78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    79 ------ProAsnPro---ThrArgArgLysProGly------LysCys 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23 ValGluGlySerGlyLysSerPheLysAlaGlyValCysProPro----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4905
112
112
43
68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-613-105-2 (1-132) x US-08-475-352-3 (1-4905)
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 4905 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |||:::|||
|081 CCCAAAGCCTGT 1092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.186
109.00
32.32%
25.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                123 GlyLysSerCys 126
                                                                                                                                                                                                                                                                                                                                 ) NAME/KEY: CDS
; LOCATION: 100..4125
US-08-475-352-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
```

Search completed: October 24, 2004, 05:53:46 Job time : 94 secs

Abl6659 Thyroid c Abl66679 Lung canc Aas17499 Human cDN Abt11084 Human bre	Abz34724 Coding se Acc50295 Breast ca	Add 9561 Human NOV Adf81611 Leukaemia Aca56673 Human 819	Advisit of Advisit of Advisit of Adjessed Human mRN Adjessed Human pol Accio296 Breat ca	Adp65076 Human sec Ad126771 Human SLP Adn03925 Antipsori Aaz77546 Human ova Aab57451 Human lun	Adl62375 Human ova Adl57146 Human NOV	Ad157140 Human NOV Ad157142 Human NOV	Adis/148 Human NOV Adkil941 Breast Ca Adis/150 Human NOV	Aal60894 Human sec Adk61172 Ovarian c Aax16271 DNA seque	Aac97622 DNA encod Aai67582 DNA seque Abk8R025 DNA seque	Abk88016 DNA encod Ade95613 Human NOV	Aan60463 Serine pr Aan60464 Synthetic Aax16236 Serine pr	Aax16194 Serine pr Aac97579 DNA encod	Aac97528 Secretory Aai67488 Recombina	Aai67489 Recombina Aac97624 DNA encod	Aai67583 DNA seque Abk88022 DNA seque	Aax16272 DNA seque Ad157138 Human NOV	Aah57243 Human lun Adk11942 Breast ca	Aac97529 DNA encod Adk70406 Respirato	Aan60465 Synthetic Aac97530 Human gen	Aai67491 Recombina Aan70929 Sequence	Aan60468 ompA-secr Aan60469 ompA-tc-m abc73677 Murine SI	Abg73674 Murine SL	Abz34649 Coding se Aax18514 Mouse IMC	Aax18515 Mouse IMC Aca56426 Human sig	Mouse Mouse	354 Seque	ax16273	5442 CLPI.
φφφφ	ω ω ⁻	2222	8 11 19	598 11 ADD65036 598 11 ADD65076 598 12 ADL26771 599 2 AAZ77546 636 4 AAH57451	12	121	122	624	w 4 4	92	чч 8	0 m n	J W 4	4 M	4 0	12	10	3	- n	4 H	u	φ	œ ~	22	7 2	, H (0 4	r 0
100.0 100.0 100.0	100.0	00000	00000	762 100.0 762 100.0 762 100.0 762 100.0	100.0 99.2	10.00	9 9 9 9 7 9 9 4 . 8 9 .	94.6 92.3 84.6	84.6 84.6	635 83.3 635 83.3	833.3 6.00 6.00 6.00 6.00 6.00	83.3	. e. e.	83.3 83.3	83.3 83.3	82.8 81.9	78.3	78.2	71.8	71.8 71.5	539 70.7 535 70.2	3.5 60.8	3.5 60.8 3.5 60.8	3.5 60.8 458 60.1	60.1 49.6	45.7	4.04	4. 4. 4. 5.
7 8 8 9 10	112	114 115°.	17 188 199	2 2 2 2 2 2 4 8 8 8 8 8 8 8 8 8 8 8 8 8	27 28 29	31	ማ የአ የአ የአ የአ የአ የአ የአ የአ የአ የአ የአ የአ የአ የ	7	ď	•	6 4 4 8 4 4	46	4 4 U	5 E S	553	55.5	57	Ŋ	61 62	64		68	69 46 70 46		73	57.	77	79
GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.	OM protein - nucleic search, using frame_plus_p2n model	Run on: October 24, 2004, 02:50:16; Search time 432 Seconds (without alignments) 1603.990 Million cell updates/sec	Title: US-10-613-105-2 Perfect score: 762 Sequence: 1 MKSSGLFPFLVLLALGTLAPRDLKCCMGMCGKSCVSPVKA 132	Scoring table: BLOSUM62 Xgapop 10.0 , Xgapext 0.5 Ygapop 10.0 , Ygapext 0.5 Ygapop 6.0 , Ygapext 7.0 Delop 6.0 , Delext 7.0	, 2624710521	umber of hits sa	Minimum DB seq length: 0 Maximum DB seq length: 200000000	Post-processing: Minimum Match 0% Maximum Match 100% Listing first 100 summaries	Command line parameters	-MODEMENTARING TO THE TABLE TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL THREE TO THE TOTAL THREE TO TO THE TOTAL THREE TO THE TOTAL THREE TO THE TOTAL THREE TO THE TOTAL THREE TO THE TOTAL THREE TO THE TOTAL THREE TO THE TOTAL THREE TO THE TOTAL THREE TOTAL THREE TO THE TOTAL THREE TOTAL THREE TOTAL THREE TO THE TOTAL THREE TOTAL TH	-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi -LIST=100 -DOCALIGN=200 -THE SCORE=pct -THE MAX=100 -THE MING -ALIGN=45 -MODE=1.0CD1OTHTPMT-ptc -NOPE=st -HEADSIZE=500 -MINIRE MAXIEN-200000000		-DEV TIMECOTEIZO -WAKN TIMECOTESO -THREADSEL -AGAPCFELU -AGAPEATESO.S -FGAFOFES -FGAPEXT=7 -YGAPOPE10 -YGAPEXT=0.5 -DELOPE6 -DELEXT=7	٠,,		4: genesequ2001as:* 5: genesequ2001bs:*			0: genesegn2003c 1: genesegn2003d	2: geneseqn2004s:*	Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed,	r che cocai	SUMMARIES \$	Result Query No. Score Match Length DB ID Description	100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	762 100.0 422 10 ADE95609 Ade95609	Aan7000 bedracent	762 100.0 565 4 AAF22043 AAI32043 762 100.0 594 6 ABS76518 Abe76518

(1

Aaz88483 Truncated	Ach04226 Human cDN	Aad45347 Mouse ant	Adi70084 Human ova	Adi76414 Human ova	Aac97619 DNA inser	Aac97576 Insert B	Aai67538 Serine pr	Abl67811 Ovary can	Abl66677 Lung canc	Abl67461 Thyroid c	Abk64114 Human ben	Ad185843 DNA up-re	Ad185844 DNA up-re	Adl41650 Human ova	Aac97577 Insert C	Aac97620 DNA inser	Aai67539 Serine pr	Aaa70066 Human ova	Abn72960 Ovarian c	Ada08530 Human ova
AAZ88483	ACH04226	AAD45347	ADI70084	ADI76414	AAC97619	AAC97576	AA167538	ABL67811	ABL66677	ABL67461	ABK64114	2 ADL85843	2 ADL85844	ADL41650	AAC97577	AAC97620	AA167539	AAA70066	ABN72960	ADA08530
180 3	805 9	9 060#	313 5	313 5	135 3	135 3	135 4	411 6	411 6	411 6	411 6	248 13	248 13	188 5	120 3	120 3	120 4	292 3	292 6	292 9
44.5	44.5	37.4	37.2	37.2	35.7	35.7	35.7	34.6	34.6	34.6	34.6	33.8	33.8	31.9	31.2	31.2	31.2	29.4	29.4	29.4
339	339	285	283.5	283.5	272	272	272	264	264	264	264	257.5	257.5	243	238	238	238	224	224	224
80	81	82	83	. 84	82	98	87	ი 88		0 0		92	93	94	95	96	97	86	66	100

ALIGNMENTS

```
Secretory leukocyte protease inhibitor ovarian tumour marker gene, #53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hough CD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sherman-Baust CA, Pizer ES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (USSH ) US DEPT HEALTH & HUMAN SERVICES.
                                                                               ABA83108 standard; DNA; 399 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       03-APR-2001; 2001WO-US010947.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   03-APR-2000; 2000US-0194336P.
                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gene therapy; vaccine; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200175177-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                 08-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Morin PJ,
                                                                                                                                                          ABA83108;
RESULT 1
ABA83108
ID ABA83108
ID ABA83108
ID ABA83108
ID ABA83108
ID ABA83108
ID ABA83108
ID ABA83108
ID ABA83108
ID B SCI
IN BETT BE BETT WW WO2
IN WWD IN WO2
IN WWD IN WO2
IN WWD IN WWD IN WO3
IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WWD IN WHAT WAS ARRESTED IN WWD IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTED IN WHAT WAS ARRESTE
```

à g 유 ò 셤 셤 ò ò Ovarian tumour marker gene; human; overexpression; upregulation; encer; diagnosis; prognosis; disease monitoring; identification; serous cystadenoma; borderline serous tumour; serous cystadenocarcinoma; mucinous cystadenocarcinoma; mucinous cystadenocarcinoma; mucinous cystadenocarcinoma; encourcinoma; endometrioid carcinoma; undifferentiated carcinoma; clear cell adenocarcinoma; cystadenofibroma; adenofibroma; Brenner tumour; serial analysis of gene expression; SAGE; immune response pathway; cell proliferation regulation; protein folding; membrane localised; secreted; therapeutic target; cytostatic;

Detecting and identifying ovarian tumor, identifying increased risk for developing ovarian cancer, and determining effectiveness of ovarian cancer treatment, by measuring expression level of ovarian tumor marker 2001-626450/72. P-PSDB; ABB50282

23; Page 98; 140pp; English. Claim

gene.

The invention relates to methods for diagnosing and prognosing ovarian tumours in an individual via the detection and measurement of the expression of ovarian tumour marker genes (ABA83081-ABA83122, ABA83180,

ABA83182 and ABA83184) or segments thereof (ABA83123-ABA83169, ABA83179, ABA83181 and ABA83183). The methods of the invention are useful for detecting an ovarian tumour in a patient, for identifying an individual at increased risk for developing ovarian cancer, in prognostic tests for assessing the relative severity of ovarian cancer, in tests for monitoring a patient in remission from ovarian cancer, in tests for constituting disease status in a patient being recated for ovarian cancer. The monitoring disease status in a patient being treated for ovarian cancer. The methods can additionally be used to identify a particular tumour as being an ovarian tumour (i.e., an epithelial ovarian tumour selected from serous cystadenoma, borderline serous tumour, mucinous cystadenocarcinoma, endometrioid carcinoma, undifferentiated carcinoma, cystadenocarcinoma, cystadenofibroma, adenofibroma and Brenner tumour. The ovarian tumour marker genes of the invention were identified cusing SAGE (serial analysis of gene expression) and were found to be overexpressed in a broad variety of ovarian epithelial tumour cells implicated in immune response pathways, in the regulation of cell implicated in immune response pathways, in the regulation of cell consider an epithelial calls. The marker genes are membraned in protein folding, and many of these are membraned considered in a protein folding to their weep as diagnostic and considered in a protein folding the page of the server membrane. prognostic markers, the ovarian tumour marker genes or their encoded proteins may be used as therapeutic targets for the treatment and prevention of ovarian cancer. Sequences ABA831081-ABA83122, ABA83180, ABA83182 and ABA83184 represent the ovarian tumour marker genes of the nvention

Seguence 399 BP; 91 A; 100 C; 111 G; 97 T; 0 U; 0 Other;

399	132	0	0	0	0
Length:	Matches:	Conservative:	Mismatches:	Indels:	Gaps:
1.36-58	762.00	100.00%	100.001	100.00\$	ω
Alignment Scores: Pred. No.:	Score:	Percent Similarity:	Best Local Similarity:	Query Match:	DB:

US-10-613-105-2 (1-132) x ABA83108 (1-399)

٥٨	1 MetLysSerSerGlyLeuPh	MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro 2	20
QQ	1 ATGAAGTCCAGCGCCTCTT	AIGAAGTCCAGCGGCCTCTTCCCCTTCTGGTGCTTGCCTGGGAACTCTGGCACCT 6	09
٥٨	21 TrpAlaValGluGlySerGly	TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer 4	40
Db	61 TGGGCTGTGGAAGGCTCTGG	TGGGCTGTGTGGAAAGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCT	120
δγ	41 AlaGlnCysLeuArgTyrLy	AlaGinCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys 6	09
Dp	121 GCCCAGTGCCTTAGATACAA	GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG 1	180
γ	61 LysArgCysCysProAspTh	LysArgCysCysProAspThrCysGlylleLysCysLeuAspProValAspThrProAsn 8	80
ΩÞ	181 AAGAGATGTTGTCCTGACAC		240
δλ	81 ProThrArgArgLysProGly	ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuMsn 1	100
Dp	241 CCAACAAGGAGGAAGCCTGG	CCAACAAGGAAGGAAGCCTGGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC 3	300
δ	101 ProProAsnPheCysGluMet	ProproAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 1	120
qq	301 CCCCCCAATTTCTGTGAGAT	CCCCCCAATITCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 3	360
δλ	121 MetCysGlyLysSerCysValSerProValLysAla 132	SerProValLysA a 132	
Ωp	361 ATGTGTGGGAAATCCTGCGTTTCCCCTGTGAAAGCT	rccctgtgaagcr 396	

ADE95609 standard; cDNA; 422 ADE95609 8XXX8

BP.

12-FEB-2004 (first entry)

ADE95609;

```
cardiant; antiarteriosclerotic; hypotensive; cyčostatic; anorectic; antirheumatic; antiarthritic; antidiabetic; nephrotropic; dermatological; immunosuppressive; anti-HIV; antidiflammatory; neuroprotective; noorropic; antipsoriatic; antiparkinsonian; antiashmatic; neuroleptic; antidepressant; antiallergic; gynaecological; gene therapy; vaccine; NOVX-associated disorder; cardiomyopathy; atherosclerosis; hypertension; cancer; obesity; rheumatoid arthritis; diabetes; glomerulonephritis; psoriasis; rheumatoid arthritis; diabetes; glomerulonephritis; Alzheimer's disease; Parkinson's disease; asthma; schizophrenia; depression; allergy; fertility disorder; gene; ss; NOVX27a.
                                  protein; biochemical stimulation; physiological stimulation;
            Human NOVX27a protein cDNA sequence.
                                                                                                                                                                                                                                                                               05-DEC-2001; 2001US-0336600P.
07-DEC-2001; 2001US-0338285P.
12-DEC-2001; 2001US-0341346P.
17-DEC-2001; 2001US-0341477P.
17-DEC-2001; 2001US-0341540P.
20-DEC-2001; 2001US-0345592P.
27-DEC-2001; 2001US-0344903P.
31-DEC-2001; 2001US-0344903P.
11-APR-2002; 2002US-038091P.
17-MAY-2002; 2002US-038091P.
                                                                                                                                                                                                                                                                                                                                                                                                                   28-MAY-2002; 2002US-0383534P.
28-MAY-2002; 2002US-0383344P.
29-MAY-2002; 2002US-0383829P.
29-MAY-2002; 2002US-0384024P.
07-AUG-2002; 2002US-0401788P.
31-0CT-2002; 2002US-0401788
                                                                                                                                                                                                                                                            03-DEC-2002; 2002WO-US038594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2003-513974/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               P-PSDB; ADE95610
                                                                                                                                                                                                           WO2003050245-A2
                                                                                                                                                                                                                                    19-JUN-2003
                                                                                                                                                                                      Homo
                                     NOVX
```

Š Alsobrook JP, Anderson DW, Boldog FL, Burgess CE, Chillakuru RA, Edinger SR, Gerlach VL, Gorman L, Gould-Rothberg BE, Guo X; Jeffers ME, Ji W, Li L, Malyankar UM, Miller CE, Murphey R; Patturajan M, Peyman JA, Rastelli L, Rieger DK, Shenoy SG; Smithson G, Starling G, Taupier RJ, Voss EZ, Zhong H, Zhong M;

New NOVX polypeptides and nucleic acids, useful for preventing or treating NOVX-associated disorders, e.g. cancer, cardiomyopathy, atherosclerosis or diabetes, and in chromosome mapping, tissue typing or pharmacogenomics

Claim 20; SEQ ID NO 141; 211pp; English.

This invention relates to novel NOVX proteins, and the DNA sequence which physiological responses in a cell, a tissue, an organ or an organism. Compounds which modulate the proteins of the invention may have cardiant, antiarteriosclerotic, hypotensive, cytostatic, anorectic, antirheumatic, antiarthritic, antidiabetic, nephrotropic, dermatological, immunosuppressive, anti-HIV, antiplammatory, neuroprotective, no notropic, antipsoriatic, a

```
associated with a human disease. The invention may be useful in diagnosing, treating or preventing NOVX-associated disorders, for example cardiomyopathy, atherosclerosis, hypertension, cancer, obsesity, rheumatoid arthritis, diabetes, glomerulonephritis, psoriasis, skin disorders, AIDS, inflammation, multiple sclerosis, Alzheimer's disease, Parkinson's disease, asthma, schizophrenis, depression, allergies or fertility disorders. The nucleic acids may further be used as hybridisation probes, in chromosome mapping, tissue typing, preventive medicine, and pharmacogenomics. The present sequence is the cDNA sequence which encodes the human NOVX27a protein of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81 ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                            75 TGGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTGCTCCTCCTAAGAAATCT 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        80
                                                                                                                                                                                                                                                                                                                                                                            20
                                                                                                                                                                                                                                                                                                                                                                                                                                          40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                          74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             255 CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC
                                                                                                                                                                                                                                                                                                                                                                                           15 ATGAAGTCCAGCGGCCTCTTCCCCCTTCCTGGTGCTTGCCTTGCCCTGGGAACTCTGGCACCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            195 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     315 CCCCCCAATTTCTGTGAGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC
                                                                                                                                                                                                                                                                                                                                                                        MetlysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                          21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                              Sequence 422 BP; 94 A; 111 C; 119 G; 98 T; 0 U; 0 Other;
                                                                                                                                                                                                                             MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    375 ArgredegaAArcerecerricecerereAAAcer 410
                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                              Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cytostatic; Gene therapy; leukaemia; ss
                                                                                                                                                                                                                                                                                                                                             US-10-613-105-2 (1-132) x ADE95609 (1-422)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Leukaemia-related DNA sequence #222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             04-NOV-2002; 2002WO-EP012303.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-NOV-2001; 2001EP-00126244.
                                                                                                                                                                                                                               1.39e-58
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADF79666 standard; DNA; 551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2003039443-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unidentified
                                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADF79666;
                                                                                                                                                                                                                                                                                              Query Match:
                                                                                                                                                                                                                                  Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 3
ADF79666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ##X#XBX#X8X#XBX#XBX#
     888888888888888888
                                                                                                                                                                                                                                                                                                                                                                                                          염
                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    용
                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
```

(human

(SCHO/) (KERN/)

(UYLU-) (HAFE/)

Eils R,

```
ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HUSI-type I inhibitors are useful for treating chronic bronchitis, chronic cervical inflammation; inflammation associated with excessive mucus prodn.; post-operative bleeding caused by hyperfibrinolysis, and shock. They are esp. suitable for administration as spray or inhalation. The expression control sequence on the DNA fragment in AAN7028 is bound to the 5' end of HUSI cDNA in an expression vector. (Updated on 25-MAR-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AlaginCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  119 TGGGCTGTGGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTCAAGAAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LysArgCysCysProAspThrCysGly1leLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                       New protein with human seminal plasma inhibitor activity – and ne
coding sequences, vectors and transformed organisms, useful e.g.
                           Sequence encoding protein with the biological activity of HUS seminal plasma inhibitor) type I inhibitors encoded on pRH 34
                                                                          Bronchitis therapy; cervix inflammation; hyperfibrinolysis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         565
132
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            o ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                            Machleidt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C; 171 G; 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (1-565)
                                                                                                                                                                                                                                                                                                                                                             Gassen HG,
                                                                                                                                     Location/Qualifiers
59. .457
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                         coding sequences, vectors and transf
treating bronchitis or inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-613-105-2 (1-132) x AAN70930
                                                                                                                                                                                                                                                                  86DE-03600571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 5; Fig 5; 28pp; German
                                                                                                                                                                                                                                                                                                86DE-03600571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP; 106 A; 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.96e-58
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               correct PA field. >
(first entry)
                                                                                                                                                                                                                                                                                                                                                            Appelhans H,
                                                                                                                                                                                                                                                                                                                              GMBH
                                                                                                                                                                                                                                                                                                                              CHEF ) GRUENENTHAL
                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1987-222038/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                         P-PSDB; AAP70584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 565
                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                  10-JAN-1986;
                                                                                                                                                                                                                                                                                                10-JAN-1986;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
 21-MAY-1991
                                                                                                                                                                                                      DE3600571-A
                                                                                                                                                                                                                                   06-AUG-1987
                                                                                                                                                                                                                                                                                                                                                             Heinzel R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ដូ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ..
02
                                                                                                                                                     CDS
 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                            The present invention relates to a method (M1) for determining the subtype of leukaemia cells and whether a patient sample contains leukaemia cells. The method comprises determining the expression profile of a group of markers in a patient sample. The method is useful for determining the presence of leukaemia cells, its types or subtypes, and for the preparation of a medicament for treating leukaemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                73
                                                                                                                                                                                    Determining the subtype of leukemia cells and whether a patient sample contains leukemia cells or other cells, useful for treating leukemia, comprises determining the expression profile of a group of markers in a
                                                                                                           Ë
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    74 TGGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuMen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ccaacaaggaagccrgggaagrgcccagrgacrrarggccaargrrrgargcrraac
                                                                                                           Dugae
                                                                                                             ŝ
                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 551 BP; 117 A; 146 C; 150 G; 138 T; 0 U; 0 Other;
                                                                                                           Schnittger
                                                                                                                                                                                                                                                                                                                                                                                                                                                         551
0
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             409
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Argregeaaarccrecerrececrereaaagcr
                                                                                                           Kohlmann A,
                                                                                                                                                                                                                                                                  Disclosure; SEQ ID NO 222; 2938pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (1-551)
             DEUT KREBSFORSCHUNGSZENTRUM.
UNIV LUDWIG MAXIMILIANS.
HAFERLACH T.
SCHOCH C.
KERN W.
                                                                                                                        ŝ
                                                                                                         in T, Schoch C, Kern W,
Brors B, Mergenthaler
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 x ADF79666
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.91e-58
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (revised)
                                                                                                                                                       WPI; 2003-505037/47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-613-105-2 (1-132)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                   patient sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores
                                                                                                           Haferlach
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAN70930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAN70930
```

Best Local S Query Match:

유

ò

ò g В

8

요

ઠે

셤

ઠે

셤

8

ठ

118

20

40

178

238

9

298

AAN70930 ID AAN7 XX AAN7 AC AAN7 XX ZX ZS-M

RESULT

Wed

101 359 121

ઠે

8 ठ

238

9

80

100

120

```
Human; ovarian cancer; marker; cancer; familial history; brain disorder; central netwous system disorder; bacterial mentagitis; viral meningitis; Alzheimer's disease; parkinson's disease; cerebral oedema; hydrocephalus; brain herniation; inflammation; encephalitis; testicular disorder; brain herniation; inflammation; encephalitis; cesticular disorder; heart disorder; aschaemic heart disease; atherosclerosis; neoplasm; histological type; carcinogenic; ovarian cancer marker; gene; se.
                                                                                                                                                                AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCCAAAC 298
                                                                                                                                                                                                                                       ccaacaaggaggaagccrgggaagrgcccagrgacrrarggccaargrrrgargcrraac 358
                                                                                                                                                                                                                                                                                                              ccccccaarrrcrgrgagarggarggccagccaagcgrgacrrgaagrgrrgcargggc 418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Assessing whether a patient is afflicted with ovarian cancer, useful in assessing the stage or progression of the disease, comprises comparing the expression level of a cancer marker in a sample from a patient and
                                                                                                                            LysArgCysCysProAspThrCysGlylleLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                     ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn
                                                       AlaGinCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                            ProbroasnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kovatis SG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3, Gannavarapu M, Hoersch S, Kamatkar S, Kov
Morrisey MP, Olandt PJ, Sen A, Vieby PO,
Lu K, Schmandt RE, Zhao X, Glatt K;
                                                                                                                                                                                                                                                                                                                                                     MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cDNA encoding human ovarian cancer marker M185
                                                                                                                                                                                                                                                                                                                                                                                         ATGTGTGGGAAATCCTGCGTTTCCCCTGTGAAAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 410-411; 481pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           , 2001US-0276025P.
, 2001US-0276026P.
, 2001US-031373P.
, 2001US-032380P.
, 2001US-0324967P.
, 2001US-0325149P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABS76518 standard; cDNA; 594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14-MAR-2002; 2002WO-US007826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (MILL-) MILLENNIUM PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       non cancer patient.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-723277/78.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             P-PSDB; ABG96419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200271928-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14-MAR-2001;
10-AUG-2001;
19-SEP-2001;
26-SEP-2001;
26-SEP-2001;
26-SEP-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Monahan JE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Meyers RE,
                                                       41
                                                                                          179
                                                                                                                            61
                                                                                                                                                                239
                                                                                                                                                                                                       81
                                                                                                                                                                                                                                         299
                                                                                                                                                                                                                                                                              101
                                                                                                                                                                                                                                                                                                                359
                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                         419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABS76518;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bast RC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Erom a
                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                                                                                                                                 g
                                             ò
                                                                              셤
                                                                                                                 ò
                                                                                                                                                                                                     8
                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                         ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to a method for treating endometriosis in a subject, comprising administering to the subject an amount of antileukoprotease (ALP) effective to inhibit the activity of elastase or cathepsin G, thereby inhibiting ectopic implantation of endometrial fragments. The present sequence is the coding sequence for human ALP. ALP proteinase inhibitor (SLPI) and alphalproteinase inhibitor (SLPI) and alphalproteinase inhibitor (alphal-PI). ALP plays an important role in the defence of epithelial surfaces against proteolytic damage
                   ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysRetGly 120
                                      Human, cytostatic, gynecological, elastase, cathepsin G, gene therapy, endometriosis, antileukoprotease, ALP, secretory leukoprotease inhibitor, SLPI, alphal-proteinase inhibitor, alphal-PI, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGAAGTCCAGCGGCCTCTTCCCCTTCCTGGTGCTTGCCCTAGGAACTCTGGCACCT 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProLysLysSer 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Treating and diagnosing endometriosis or promoting embryo implantation comprises determining or modulating antileukoprotease activity in a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 565 BP; 106 A; 162 C; 171 G; 126 T; 0 U; 0 Other;
                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                Human antileukoprotease coding sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (1-565)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Fig 1; 28pp; English.
                                                                                                                                                                                                       踞
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 x AAF32043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-JUL-1999; 99US-0142157P.
27-JUN-2000; 2000US-00605134.
                                                                                                                                                                                                     AAF32043 standard; cDNA; 565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-JUN-2000; 2000WO-IB000990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.96e-58
762.00
100.00$
100.00$
                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (REPR-) REPROGEN INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-138062/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-613-105-2 (1-132)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Li Z;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               P-PSDB; AAB66864.
```

Alignment Scores:

Score:

Query Match DB: Best Local

δ a ò

WO200101998-A2.

11-JAN-2001.

Neilson L,

AAF32043

AAF320

patient.

Homo sapiens

10-APR-2001

AAF32043

RESULT

셤

Human, cancer; colon; breast; ovary; oesophagus; kidney; thyroid; stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous; cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;

gene; da.

Thyroid cancer related gene sequence SEQ ID NO:5885.

15-MAY-2002 (first entry)

```
The present invention relates to a new method for assessing whether a patient is afflicted with ovarian cancer. The method involves comparing the expression level of a marker in a patient sample and the normal level of expression of the marker in a control non-ovarian cancer sample, where the marker is selected from 363 cancer markers described in the capteristing cancer, in detecting the presence of cancer as early as possible, and the recurrence of ovarian cancer. The method may also be of particular use with patients having an enhanced risk of developing ovarian cancer (e.g. patients having an enhanced risk of developing cancer). The cancer markers may be used in the management and treatment cancer. The cancer markers may be used in the management and treatment of e.g. brain and central nervous system disorders (e.g. bacterial and viral meningitis Alzheimer's a disease or Parkinson's disease), brain chisamations (e.g. bacterial or viral meningitis or encephalitis), inflammations (e.g. bacterial or viral meningitis or encephalitis), connective tissue disorders (e.g. nontuberculous grannlomations or atherosclerosis). The compositions and methods may also be used in assessing the histological type of neoplasm associated with ovarian cancer, monitoring the progression of ovarian cancer, monitoring the progression of ovarian cancer, monitoring the progression of ovarian cancer, seeseing the ovarian cancer has metaterasized or is likely to metastasize, selecting a composition for inhibiting ovarian cancer, assessing the ovarian cancer has metaterasized or is likely to researce of the ovarian cancer markers described in the progression of earner or at risk of developing ovarian cancer. The present nucleic acided the control of the ovarian cancer markers described in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  nvention
```

Sequence 594 BP; 132 A; 156 C; 155 G; 151 T; 0 U; 0 Other;

```
ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                          ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                     GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG 198
                                                                                                                                                                                                                                                                                                                         AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 258
                                                                                                                                                                                                                                                                                                                                                                               ccaacaaddadccrdddaadrdcccadrdacrrarddccaargrrrdardcrraac 318
                                                                                                                                                                                                                                                                                                                                                                                                                                    CCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 378
                                                                                                                                                                                       TrpAlaValGluGlySerGlyLyBSerPheLyBAlaGlyValCyBProProLyBLyBSer 40
                                                                                                                                                                                                                                           AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys 60
                                                                                                                                                                                                                                                                                               LysArgCysCysProAspThrCysGly1leLysCysLeuAspProValAspThrProAsn 80
                                                                                                                                                 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                              MetCy8G1yLy8SerCy8ValSerProValLy8Ala 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGTGTGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 414
           Length:
Matches:
Conservative:
Mismatches:
                                                                [ndel8:
                                                                                Gaps:
                                                                                                         US-10-613-105-2 (1-132) x ABS76518 (1-594)
           2.08e-58
762.00
100.00%
100.00%
                                      Percent Similarity:
Best Local Similarity:
Alignment Scores:
                                                                                                                                                                                                                                             41
                                                                                                                                                                                        21
                                                                                                                                                                                                                79
                                                                                                                                                                                                                                                                       139
                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                           199
                                                                                                                                                                                                                                                                                                                                                      81
                                                                                                                                                                                                                                                                                                                                                                                259
                                                                                                                                                                                                                                                                                                                                                                                                           101
                                                                                                                                                                                                                                                                                                                                                                                                                                    319
                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       379
                                                                  Query Match:
DB:
                                                                                                                                                        a
                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                             중 음
                                                                                                                                                                                                                                                                                                                  요
                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                    ð
                                                                                                                                                                                 ò
                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
```

Claim 1; SEQ ID NO 5885; 44pp; English

ABL67548 standard; DNA; 594 BP

ABL67548

ABL67548
ID ABL6
XX
AC ABL6
XX

RESULT 7

```
Screening for anti-neoplastic agent involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, and determining a change in expression of a gene of a signature gene set.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Horrigan S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Endress G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ebner R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Carter KC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000US - 0234009P
2000US - 0234034P
2000US - 023452P
2000US - 0234567P
2000US - 0234567P
2000US - 0234523P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000US-0235077P

2000US-0235280P

2000US-0235280P

2000US-0235280P

2000US-023563P

2000US-0235640P

2000US-023540P

2000US-023562P

2000US-023563P

2000US-023603P

2000US-023603P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000US-0237608P.
2000US-0244867P.
2000US-0245084P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000US-0236109P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000US-0237294P
                                                                                                                                                                                                                                                                                                                                 30-MAY-2001; 2001WO-US010838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Augustus M,
Weaver Z;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (AVAL-) AVALON PHARM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-188264/24.
                                                                                                                                                                                                                                            WO200194629-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-SEP-2000; 2
26-SEP-2000; 2
27-SEP-2000; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-SEP-2000; 28-SEP-2000; 28-SEP-2000; 28-SEP-2000; 28-SEP-2000; 29-SEP-2000; 20-SEP-2000; 20-SE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25-SEP-2000; 25-SEP-2000; 25-SEP-2000; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-SEP-2000;
27-SEP-2000;
28-SEP-2000;
                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          02-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  02-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Young PE, 1
Soppet DR,
```

WO200194629-A2

13-DEC-2001

Homo sapiens.

```
The present invention describes a method (M1) for screening for an antinophastic agent. The method involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, determining a change in comprises at least one gene (1) of a signature gene set, where (I) comprises a sequences (S) selected from 8447 sequences (given in ABL6164 comprises in indicative of anti-neoplastic activity. (I) has cytostatic activity and can be used in gene therapy. MI can be used for screening an anti-neoplastic agent, and can be used for producing a product which is the data collected with respect to the anti-neoplastic agent as a result of MI, and the data is sufficient to convey the chemical structure and/or properties of the agent. MI can be used in the treatment of cancer such as colon, breast, stomach, lung, thyroid, oesophageal, ovarian, kidney, prosette or pancreatic cancer, adenocarcinoma, carcinoma, class cell carcinoma, neuroendocrine carcinoma, pand will....
                                                                                                                                                                                                                                                                                                                                                                                                                       carcinoma, neuroendocrine carcinoma, papillary carcinoma and Wilm's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tumour
                         $$$$$$$$$$$$$$$$$$$$$$
```

Sequence 594 BP; 132 A; 156 C; 155 G; 151 T; 0 U; 0 Other;

```
AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 258
                                                                                                                                                                                                                                                    ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                            TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer 40
                                                                                                                                                                                                               LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn 80
                                                                                                                                                                                                                                                               CCAACAAGGAAGGCCTGGGAAGTGCCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC
                                                                                                                                                                                                                                                                                                                               MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                            ATGTGTGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 414
        Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                        Gaps:
                                                                           US-10-613-105-2 (1-132) x ABL67548 (1-594)
        2.08e-58
762.00
100.00%
100.00%
                          Percent Similarity:
Best Local Similarity:
Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                  379
                                                                                                               19
                                                                                                                                                      79
                                                                                                                                                                         41
                                                                                                                                                                                            139
                                                                                                                                                                                                               61
                                                                                                                                                                                                                                 199
                                                                                                                                                                                                                                                    81
                                                                                                                                                                                                                                                                       259
                                                                                                                                                                                                                                                                                                             319
                                                                                                                                  21
                                                                                                                                                                                                                                                                                          101
                                                                                                                                                                                                                                                                                                                                121
                                     Best Local S
Query Match:
                   Score:
                                                                                                               g
                                                                                                                                                    g
                                                                                                                                                                                          g
                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                 a
                                                                                             ઠે
                                                                                                                                  ò
                                                                                                                                                                        ઠે
                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                ò
```

```
Screening for anti-neoplastic agent involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, and determining a change in expression of a gene of a signature gene set.
                                                                                                                                                                                                                                                                                                                                                                                                                              Horrigan S;
                                                                                                                                                                                                                                                                                                                                                                                                                              Endress G,
                                                                                                                                                                                                                                                                                                                                                                                                                              Ebner R,
                                                                                                                                                                                                                                                                                                                                                                                                                              Carter KC,
                                                            2000US-0209473P.
2000US-0209531P.
2000US-0233133P.
2000US-0233617P.
2000US-0234009P.
                                                                                                   2000US-0234034P.
2000US-0234652P.
2000US-0234567P.
2000US-0234567P.
2000US-0234924P.
2000US-0234924P.
                                                                                                                                                          2000US-0235082P.
2000US-0235134P.
2000US-0235280P.
2000US-0235637P.
                                                                                                                                                                                         2000US-0235638P.
2000US-0235711P.
2000US-0235720P.
2000US-0235840P.
                                                                                                                                                                                                                                                2000US-0236033P.
2000US-0236034P.
2000US-0236109P.
                                                                                                                                                                                                                                                                       2000US-0236111P.
2000US-0236842P.
2000US-0236891P.
                                                                                                                                                                                                                                 2000US-0236028P
                                                                                                                                                                                                                                                                                                                                       2000US-0237316P.
                                                                                                                                                                                                                                                                                                                                                                              2000US-0237608P.
2000US-0244867P.
2000US-0245084P.
                                                                                                                                                                                                                                                                                                        2000US-0237173P
                                                                                                                                                                                                                                                                                                                                2000US-0237295P
                                              30-MAY-2001; 2001WO-US010838
                                                                                                                                                                                                                                                                                                                                                                                                                              Augustus M,
                                                                                                                                                                                                                                                                                                                                                                                                                                       Weaver Z;
                                                                                                                                                                                                                                                                                                                                                                                                              (AVAL-) AVALON PHARM
                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2002-188264/24.
                                                                                                                                                                                                  27-SEP-2000;
27-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                         27-SEP-2000;
28-SEP-2000;
28-SEP-2000;
                                                                                                                                                                    25-SEP-2000;
                                                                                                                                                                                           26-SEP-2000;
                                                                                                                                                                                                                                                 28-SEP-2000;
                                                                                                                                                                                                                                                                  28-SEP-2000;
                                                                                                                                                                                                                                                                                         29-SEP-2000;
                                                                                                                                                                                                                                                                                                 02-OCT-2000;
                                                                                                                                                                                                                                                                                                                                02-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                              01-NOV-2000;
                                                                             18-SEP-2000;
                                                                                     18-SEP-2000;
                                                                                                    20-SEP-2000;
                                                                                                                                                           25-SEP-2000;
                                                                                                                                                                                                                                                                                                       02-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                             Young PE, 1
Soppet DR,
0
```

The present invention describes a method (MI) for screening for an antineoplastic agent. The method involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, determining a change in expression of at least one gene (I) of a signature gene set, where (I) comprises a sequence (S) selected from 847 sequences (given in ABL61664 to ABL70110), or is at least 95% identical to (S), where a change in expression is indicative of anti-neoplastic activity. (I) has cytostatic activity and can be used in gene therapy. MI can be used for screening an anti-neoplastic agent, and can be used for producing a product which is

Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid; stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous; cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;

gene; da

Lung cancer related gene sequence SEQ ID NO:5016.

(first entry)

15-MAY-2002

ABL66679;

ABL66679 standard; DNA; 594 BP

Claim 1; SEQ ID NO 5016; 44pp; English.

25-MAY-2001; 2001WO-US017211. 25-MAY-2000; 2000US-0207104P.

29-NOV-2001

Ö

Rastelli L, Smithson CURA-) CURAGEN CORP.

```
the data collected with respect to the anti-neoplastic agent as a result of M1, and the data is sufficient to convey the chemical structure and/or properties of the agent. M1 can be used in the treatment of cancer such as colon, breat, stomach, lung, thyroid, oesophageal, ovarian, kidney, prostate or pancreatic cancer, adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer, infiltrating ductal cancer, midiltrating lobular cancer, squamous cell carcinoma, neuroendocrine carcinoma, papillary carcinoma and Wilm's
                                                                                                                                                                                                                                                                                                                                                                                         318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                               TGGGCTGTGGAAGGCTCTGGAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCT 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ProThrArgArgLy8ProGlyLy8Cy8ProValThrTyrGlyGlnCy8LeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 378
                                                                                                                                                                                                                                                                                                          78
                                                                                                                                                                                                                                                                                                                                      40
                                                                                                                                                                                                                                                                                                                                                                                                                                              LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn 80
                                                                                                                                                                                                                                                                                 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCTTGTTGACACCCCCAAAC
                                                                                                                                                                                                                                                                                                                                    TrpAlaValGluGlySerGlyLysSerPheLyaAlaGlyValCysProProLysErr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCAACAAGGAGGAGGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; 88; antileukoprotease; antiinflammatory; antiasthmatic;
anti allergic; inflammatory lung disorder; cancer; thyroid tumour;
emphysema; asthma, bronchitis; allergy; ovarian carcinoma;
renal cell carcinoma.
                                                                                                                     Sequence 594 BP; 132 A; 156 C; 155 G; 151 T; 0 U; 0 Other;
                                                                                                                                                              594
0 0 0 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGTGTGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 414
                                                                                                                                                            Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /*tag= a
/product= "Antileukoprotease"
                                                                                                                                                                                                                    Indel8:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human cDNA encoding an Antileukoprotease.
                                                                                                                                                                                                                              Gaps:
                                                                                                                                                                                                                                                        US-10-613-105-2 (1-132) x ABL66679 (1-594)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAS17499 standard; cDNA; 594
                                                                                                                                                            2.08e-58
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19. .417
/*tag= a
                                                                                                                                                                                     Similarity:
cal Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200190421-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sapiens
                                                                                                                                                gnment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26-MAR-2002
                                                                                                                                                                                                                                                                                                           19
                                                                                                                                                                                                                                                                                                                                      21
                                                                                                                                                                                                                                                                                                                                                               79
                                                                                                                                                                                                                                                                                                                                                                                          41
                                                                                                                                                                                                                                                                                                                                                                                                                   139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAS17499;
                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                   Best Local Si
Query Match:
DB:
                                                                                              tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
  δ
                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                             윱
                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
```

```
The invention relates to diagnosing an inflammatory lung disorder in a mammal, comprising comparing the expression of a nucleic acid encoding an antileukoprotease polypeptide in mammal-derived cell population, and expression of a nucleic acid encoding the antileukoprotease in an inflammation positive or negative reference profile. Also disclosed are a computibing providing a compound that inhibites lung inflammation comprising providing a call expressing antileukoprotease, contacting the compound inthe cell, where a decrease in expression of antileukoprotease in the cell, where a decrease in expression in the call with a test compound compared to that in the absence of the test compound compared to that in the absence of the test compound inhibits lung inflammation. Also cancer computed is assessing prognosis of a mammal with a cancer or a thyroid tumour, comprising measuring the expression of a nucleic acid encoding the antileukoprotease in a mammal with expression of a nucleic acid encoding the antileukoprotease in a cancer reference profile; where a substantial similarity between the expression of the nucleic acid condending the antileukoprotease in a cancer reference profile; acid encoding the antileukoprotease in a cancer reference for diagnosing an inflammatory lung disorder such as emphysema, asthma, contributing antileukoprotease. The compound is useful for treating corrections an inflammatory disease in a mammal, preferably human, by inhibiting antileukoprotease. The compound employed in the method binds the natileukoprotease neared; and is a mammal antileukoprotease neared; and is a mallergy in a mammal and is a mallergy in a mammal and is a mammal. The compound is useful for a mammal correction and antileukoprotease neared, and is a antileukoprotease neared, and is a antileukoprotease. The compound and encoded in the method binds of the antileukoprotease neared, and is a antileukoprotease.
                                                                                                                                                                                                                                                                                                           Diagnosing inflammatory lung disorders by comparing expression of nucleic acid encoding antiliquor polypeptide in mammal-derived cell population to nucleic acid encoding the polypeptide in reference profile.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antibody, or antileukoprotease antisense nucleic acid. The methods are useful for assessing the prognosis of a mammal with thyroid carcinoma, ovarian carcinoma or renal cell carcinoma. The present sequence is a cD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   G; 151 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       594
0 0 0 0 0 0 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-613-105-2 (1-132) x AAS17499 (1-594)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 594 BP; 132 A; 156 C; 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   encoding a human antileukoprotease
                                                                                                                                                                                                                                                                                                                                                                                                             Claim 8; Page 19; 36pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2.08e-58
762.00
100.00%
100.00%
                                                                                                                                                                                                                                          WPI; 2002-106211/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity:
                                                                                                                                                                                                                                                                P-PSDB; AAU11763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local
$X\CCCCCCCCCCCCCCCCCCCCCCCX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
```

198

139 ecccaerecerraearacaagaaacergagreceagagreareacagagrereceagaag LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn

61

80

9

138

40

TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer resecterecaaescretesaastectreaaascresasteretectectaasaater 41 AlaginCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys

21 79

ò g ò 용 ઠ σ

20

0000

9

a

셤

g ठे

ઠે

g

ઠે

```
ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCAACAAGGAAGCACCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAAC 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysMetGly 120
                                                                                                                                                                                                                                                                                             ccccccarrrcrgrgagargeargeccagrgcaagcgrgacrrgaagrgrrgcarggcc 378
                                                                                                                                                                                                                                                                                                                                                                                             AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                         LysargCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to novel nucleotide sequences, which are differentially expressed in models of osteogenesis upon being put in contact with a stimulator of osteogenesis. The present sequence is one
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel isolated nucleic acid upregulated/downregulated in osteogenesis, useful for bone disease therapy in subject.
                                                                                                                                                                      1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                 19 Angaagrecagegeererreceerirecrosiserserrecerrogaagrerregeace
                                                                                                                                                                                                                                                                 TrpAlaValGluGlySerGlyLyBSerPheLyBAlaGlyValCyBProProLyBLyBSer
                                                                                                                                                                                                                                                                                                                                                               41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Osteopathic, osteogenesis modulator, gene therapy, osteogenesis, osteoporosis, bone disease, downregulator, human, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Coding sequence SEQ ID 82, upregulated in osteogenesis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MetCysGlyLysSerCysValSerProValLysAla 132
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           , Baron R, Call K,
Bushnell SE, Rawadi
                                                                                                                      US-10-613-105-2 (1-132) x ABT11084 (1-594)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 26; Page 116; 237pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABZ34724 standard; cDNA; 594 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             05-APR-2002; 2002WO-IB002211.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             05-APR-2001; 2001US-0281400P.
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-FEB-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Roman Roman S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Connolly T, Jackson A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (AVET ) AVENTIS PHARMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-058567/05
Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200281745-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-0CT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Garcia T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABZ34724;
                           Best Local S.
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                      ò
                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention relates to methods of diagnosing breast cancer in a patient, which comprise detecting the level of expression in a tissue sample of two or more genes selected from those shown in ABT09867-ABT1112, where a differential expression of the genes indicates breast cancer. The methods are useful in diagnosing, treating, detecting the progression, and in monitoring treatment of breast cancer in patients. The methods are also useful as a screening tool for agents that modulate the onset or progression of breast cancer. The breast cancer genes may be used as diagnostic markers for the prediction or identification of the malignant state of breast tissue, for confirming the type and progression of cancer, and for drug screening and assays. The present sequence is a coding sequence of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in
                                                                                                                                                                      ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                           ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                 CCAACAAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Diagnosing breast cancer in a patient comprises detecting the level or gene expression in cell or tissue samples, where a differential gene expression is indicative of breast cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; breast specific gene; breast cancer; differential expression;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human breast cancer associated coding sequence SEQ ID NO: 1218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; SEQ ID NO 1218; 260pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 594 BP; 132 A; 156 C; 155 G; 151 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    594
                                                                                                                                                                                                                                                                      MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                             Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ftp.wipo.int/pub.published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Zeng W;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cytostatic; gene therapy; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nation M, Diggans JC,
                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-JAN-2001; 2001US-0263757P.
25-APR-2001; 2001US-0286090P.
23-MAY-2001; 2001US-0292517P.
                                                                                                                                                                                                                                                                                                                                                                                                                      ABT11084 standard; cDNA; 594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-JAN-2002; 2002WO-US002176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2.08e-58
762.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (GENE-) GENE LOGIC INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2002-674803/72.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
Pred. No.:
Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABT11084;
                                                                                                                                                                      101
                                                                                                                                                                                                                      319
                                                                                                                                                                                                                                                                                                                    379
                              199
                                                                           81
                                                                                                                           259
                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Orr MS,
                                                                                                                                                                                                                                                                                                                                                                    ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABTI1084 ABT
```

Theilhaber J;

Call K,

```
Bast RC,
                                                                                                                                                                                                                                                                                          н
                                                                                                                                                                                                                                                                                                       19
                                                                                                                                                                                                                                                                                                                                                                139
                                                                                                                                                                                                                                                                                                                                                                                            199
                                                                                                                                                                                                                                                                                                                                                                                                                        259
                                                                                                                                                                                                                                                                                                                                                                                                                                       101
                                                                                                                                                                                                                                                                                                                                                                                                                                                     319
                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                          81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADB75550
                                                                                                                                                                                                                                                       Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADB75550
ID ADB7
XX
AC ADB7
셤
                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                             원
                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
such sequence. This sequence can be used for diagnosing osteoporosis/bone disease in a patient, promoting osteogenesis and/or preventing osteoporosis/bone disease. The present sequence encodes a secreted
                                                                                                                                                   CCAACAAGGAAGCATGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC 318
                                                                                                                                                                                                                                                                             CCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 378
                                                                                                                                                                                        ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                     ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                        20
                                                                                                                                    78
                                                                                                                                                                                9
                                                                                                                       MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                41 AlaGlnCygLeuArgTyrLygLygLygProGluCygGlnSerAspTrpGlnCygProGlyLyg
                                  594 BP; 132 A; 156 C; 155 G; 151 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                     88.
                                                                                                                                                                                                                                                                                                                                                                                                    Human; breast cancer; cytostatic; gene therapy; gene;
                                                                                                                                                                                                                                                                                                MetCyeGlyLyeSerCyeValSerProValLyeAla 132
                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                      associated cDNA sequence SEQ ID
                                                                                                         x ABZ34724 (1-594)
                                                                                                                                                                                                                                                                                                                                           ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; 2001US-0301572P.
; 2001US-0306501P.
; 2001US-0325002P.
; 2002US-0362585P.
; 2002US-0380391P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-JUN-2001; 2001US-0299887P.
                                                                                                                                                                                                                                                                                                                                           ACC50295 standard; cDNA; 594
                                                    2.08e-58
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-JUN-2002; 2002WO-US019669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (MILL-) MILLENIUM PHARM INC
                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                         US-10-613-105-2 (1-132)
                                                             Score:
Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2003004989-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-SEP-2001;
05-MAR-2002;
14-MAY-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27-JUN-2001;
18-JUL-2001;
                                                                                                                                                                                                                                                                                                                                                                       12-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                 Alignment Scores
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                              16-JAN-2003
                                                                                                                                      19
                                                                                                                                                    21
                                                                                                                                                                 79
                                                                                                                                                                                              139
                                                                                                                                                                                                                          199
                                    Sequence
                                                                                                                                                                                                            61
                                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                       259
                                                                                                                                                                                                                                                                    101
                                                                                                                                                                                                                                                                                   319
                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                               379
                                                                                                                                                                                                                                                                                                                                                          ACC50295;
                                                                           Best Local Si
Query Match:
DB:
                     protein
                                                                                                                                                                                                                                                                                                                                                                                      Breast
                                                                                                                                                                                                                                                                                                                            ठ हे ठ
                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                           쉱
ឧដ្ឋឧ
                                                                                                                                    g
                                                                                                                                                    8 6
                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                       8 8
                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                ò
                                                                                                                        ò
```

```
The present invention describes a method for assessing whether a patient is afflicted with breast cancer. The method comprises comparing the level of expression of a marker (gene/polypeptide see ACCS0076 to ACCS0334 and ABR47386 to ABR47632) in a patient sample and the normal level of expression of the marker in a control non-breast cancer sample, where a significant increase in the level of expression of the marker in the patient sample and the normal level is an indication that the patient is afflicted with breast cancer. The breast cancer associated sequences from the present invention have cytostatic activities and can be used in gene therapy. The method is useful for diagnosing and treating breast cancer. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from MIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           378
                                                                                                                                                                     expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ProThrArghrgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ProProAsnPheCysGJuMetAspGJyGlnCysLysArgAspLeuLysCysCysMetGJy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGAAGTCCAGCGGCCTCTTCCCCTTCCTGGTGCTGCTTGCCCTGGGAACTCTGGCACCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        41 AlaGlnCysLeuArgTyrLysLysBroGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                  Breast cancer diagnosis or treatment by comparing the level of exproof a marker in a patient sample with that in the control non-breast cancer sample.
Gannavarapu M, Glatt K, Hoersh S, Kamatkar S;
, Monahan JE, Myer V, Wang Y, Xu Y, Zhao X, Meyers R
Hortobagyi GN, Pusztai L, Meric F, Sahin A, Mills GB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 594 BP; 132 A; 156 C; 155 G; 151 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     594
0 0 0 0 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGTGGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                Claim 1; SEQ ID NO 429; 128pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (1-594)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-613-105-2 (1-132) x ACC50295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADB75550 standard; cDNA; 594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2.08e-58
762.00
100.00%
100.00%
                                                                                             WPI; 2003-210381/20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                                                                      P-PSDB; ABR47595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
Pred. No.:
  Lillie J,
Mertens M.
```

us-10-613-105-2.rng

```
cardiant; antiatteriosclerotic; hypotensive; cytostatic; anoractic; antirheumatic; antiatteriosclerotic; hypotensive; cytostatic; anotactic; antirheumatic; antiarthritic; antidiabetic; nephrotropic; dermatological; immunosuppressive; anti-HIV; antiinflammatory; neuroprotective; nortropic; antidepressant; antialleraic; gynaecological; gene therapy; vaccine; NOVX-associated disorder; cardiomyopathy; atherosclerosis; hypertension; ancer; obesity; rheumatolid arthritis; diabetes; glomerulonephritis; psorlasis; skin disorder; AIDS; inflammation; multiple sclerosis; Alzabimer's disease; Parkinson's disease; asthma; schizophrenia; depression; allergy; fertility disorder; gene; ss; NOVX27b.
                                                                                                                                                                              119 CCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 378
                                                                                                              259 CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAAC 318
                                                                                                                                                  ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                    199 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 258
                                                                          81 'ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn
LysArgCysCysProAspThrCysGly1leLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein; biochemical stimulation; physiological stimulation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Single nucleotide polymorphism"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Single nucleotide polymorphism"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Single nucleotide polymorphism"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Single nucleotide polymorphism"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /standard_name= "Single nucleotide polymorphism"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Single nucleotide polymorphism'
                                                                                                                                                                                                                                MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                      Human NOVX27b protein cDNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /standard_name=
replace(53,C)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /*tag= c
/standard_name=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /standard_name=
replace(169,C)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   name=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /standard_name=
replace(193,A)
                                                                                                                                                                                                                                                                                                                                                 ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /standard_name
replace(188,A)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2001US-0341540P.
2001US-0342592P.
2001US-0344297P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           replace (173,G)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  replace (38, C)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2001US-0338285P.
2001US-0341346P.
2001US-0341477P.
                                                                                                                                                                                                                                                                                                                                                   ADE95611 standard; cDNA; 594
                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2003050245-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-DEC-2001;
20-DEC-2001;
27-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   03-DEC-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12-DEC-2001;
17-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         05-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                               12-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             variation
  61
                                                                                                                                                      101
                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                      379
                                                                                                                                                                                                                                                                                                                                                                                         ADE95611;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             variation
                                                                                                                                                                                                                                                                                                              RESULT 14
                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                      à
                                                                                                                                                                                          용
                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                셤
                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to newly discovered cancer markers associated with the cancerous state of prostate cells. Also disclosed is a method of the cancerous state of prostate cells. Also disclosed is a method of of the invention involves assessing whether a patient is afflicted with prostate cancer. The method of the invention involves assessing whether a patient is afflicted with prostate cancer by comparing the level of expression of a marker in a control non-prostate cancer sample, where a significant increase in the level of expression of the marker in the patient sample and the normal level of expression of the marker in the patient sample and the normal control indicates that the patient is afflicted with prostate cancer.

Nucleic acids of the invention are useful for diagnosing or treating prostate cancer, and may be useful in gene therapy. Sequences given in the patient for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at they wipo int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            resecrerereaasecricresaaasrecricaaasereseasicrererecreraasaaarer 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TrpalavalGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysEser 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AlaGinCysLeuArgTyzLysLysBroGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New nucleic acid molecule, useful for diagnosing or treating prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gorbatcheva
Anderson D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 594 BP; 132 A; 156 C; 155 G; 151 T; 0 U; 0 Other;
                                                                                                Prostate; cancer; cytostatic; gene therapy; marker; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                   , Gannavarapu M, (
Glatt K, Zhao X,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; SEQ ID NO 374; 99pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (1-594)
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ¥Õ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Endege WC
Wonsey AM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-613-105-2 (1-132) x ADB75550
                                                                                                                                                                                                                                                                                          25-JUL-2001; 2001US-0307982P.
22-AUG-2001; 2001US-0314356P.
25-SEP-2001; 2001US-0325020P.
12-DEC-2001; 2001US-0341746P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2.08e-58
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                      25-JUL-2002; 2002WO-US023913
                                                                                                                                                                                                                                                                                                                                                                         05-MAR-2002; 2002US-0362158P
                                                                                                                                                                                                                                                                                                                                                                                                             (MILL-) MILLENNIUM PHARM INC
                                                            Prostate cancer marker cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Monahan JE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kamatkar S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-248033/24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
                                                                                                                                                                          WO2003009814-A2.
                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
Pred. No.:
                        04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                  06-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Schlegel I
Hoersh S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
DB:
```

g

ઠ

유 ઠે

ò

us-10-613-105-2.rng

```
셤
                                      셤
                                                                      ò
                                                                                                  셤
                                                                                                                            ò
                                                                                                                                                      셤
                                                                                                                                                                                      ò
                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                This invention relates to novel NOVX proteins, and the DNA sequence which encode them, having properties related to stimulation of biochemical or physiological responses in a cell, a tissue, an organ or an organism.

Compounds which modulate the proteins of the invention may have cardiant, antiarteriosclerotic, hypotensive, cytostatic, anorectic, antirheumatic, antiarteriosclerotic, hypotensive, cytostatic, anorectic, antirheumatic, immunosuppressive, anti-HIV, antiinflammatory, neuroprotective, neuroleptic, immunosuppressive, antipartinonian, antiasthmatic, neuroleptic, nootropic, antipartinonian, antiasthmatic, neuroleptic, antidepressant, antiallergic or gynaecological activities. The DNA sequences of the invention may be useful for gene therapy whilst the protein sequences of the invention may be useful in a sesociated with a human disease. The invention may be useful in dispersion, treating a syndrome associated with a human disease. The invention may be useful in charmanic dispersion, allergies or cardiomyopathy, atherosclerosis, hypertension, cancer, obesity, theumation, multiple sclerosis, Alzheimer's disease, cardiomyopathy, atherosclerosis, hypertension, depression, allergies or theumatori arthritis, postiasis, skin disperse, and pharmacogenomics. The present sequence is the cDNA sequence medicine, and pharmacogenomics. The present sequence is the cDNA sequence which encodes the human NOVX27b protein of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New NOVX polypeptides and nucleic acids, useful for preventing or treating NOVX-associated disorders, e.g. cancer, cardiomyopathy, atherosclerosis or diabetes, and in chromosome mapping, tissue typing or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATGAAGTICCAGCGCCTCTTCCCCTTCCTGGTGCTTGCCCTGGGAAACTCTGGCACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                   Chillakuru RA;
                                                                                                                                                                                                                Alsobrook JP, Anderson DW, Boldog FL, Burgess CE, Chillakuru RA, Edinger SR, Gerlach VL, Gorman L, Gould-Rothberg BE, Guo X, Jeffers ME, Ji W, Li L, Malyankar UM, Miller CE, Murphey R; Patturajan M, Peyman JA, Rastelli L, Rieger DK, Shenoy SG; Smithson G, Starling G, Taupier RJ, Voss EZ, Zhong H, Zhong M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 594 BP; 132 A; 156 C; 155 G; 151 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indel8:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gape:
                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 20; SEQ ID NO 143; 211pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-613-105-2 (1-132) x ADE95611 (1-594)
          17-APR-2002; 2002US-0373288P.
17-MAY-2002; 2002US-038098IP.
17-MAY-2002; 2002US-038194P.
28-MAY-2002; 2002US-0383344P.
29-MAY-2002; 2002US-0383744P.
29-MAY-2002; 2002US-0383744P.
29-MAY-2002; 2002US-038329P.
29-MAY-2002; 2002US-0384024P.
26-MG-2002; 2002US-0401788P.
26-MG-2002; 2002US-0401788P.
                                                                                                                                                            2002US-00406353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2.08e-58
762.00
100.00%
100.00%
                                                                                                                                                                                        (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                        WPI; 2003-513974/48.
P-PSDB; ADE95612.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                 pharmacogenomics.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
                                                                                                                                                         02-DEC-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Мо.:
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠ
```

```
198
                                                                                                                                            258
                                                                                                                                                                                      81 ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                       378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to a method (MI) for determining the subtype of leukaemia cells and whether a patient sample contains leukaemia cells. The method comprises determining the expression profile of a group of markers in a patient sample. The method is useful for determining the presence of leukaemia cells, its types or subtypes, and for the preparation of a medicament for treating leukaemia.
                                                                                            8
  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Determining the subtype of leukemia cells and whether a patient sample contains leukemia cells or other cells, useful for treating leukemia, comprises determining the expression profile of a group of markers in a
                           ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly
                                                                                                                                                                                                                                                                                                                           319 CCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dugae M;
41 AlaGlnCysLeuArgTyrLysLysBroGluCysGlnSerAspTrpGlnCysBroGlyLys
                                                                                               LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn
                                                                                                                                              199 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCCAAAC
                                                                                                                                                                                                                       Schnittger S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       594
                                                                                                                                                                                                                                                                                                                                                                                       MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                  379 ATGTGTGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kohlmann A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 G; 151 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure, SEQ ID NO 2167; 2938pp, English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cytostatic; Gene therapy; leukaemia; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Leukaemia-related DNA sequence #2167.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEUT KREBSFORSCHUNGSZENTRUM.
UNIV LUDWIG MAXIMILIANS.
HAFERLACH T.
SCHOCH C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 594 BP; 132 A; 156 C; 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eils R, Brors B, Mergenthaler S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kern
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-NOV-2001; 2001EP-00126244.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-NOV-2002; 2002WO-EP012303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADF81611 standard; DNA; 594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-FEB-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Schoch C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-505037/47.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2003039443-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  patient sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KERN W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Haferlach T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15-MAY-2003
                                                                                               61
                                                                                                                                                                                                                                                                                          101
                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEKR-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KERN/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HAFE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SCHO/)
```

```
polynuciationed in the specification. The combination is useful as an extray element in a microarray for monitoring the expression of a number of target polynucleotides. The microarray is particularly useful in the diagnosis and treatment of cancer and immunopathology and neuropathology. The microarray is particularly useful in the diagnosis and treatment regimens, drug discovery and development, toxicological and carcinogenicity studies, forensics and pharmacogenomics. The microarray is also useful for monitoring progression of diseases and for developing sophisticated profiles for the effects of currently available therapeutic drugs. The combination is also useful for purifying a subpopulation of mRNMs, cDNMs and genomic fragments and in research and diagnostic applications. The array can detect changes in expression in a large number of genes coding for different signaling pathway populations which can be used to diagnose various diseases including cancer e.g. adenocarcinoma and leukaemia, immunopathies e.g. AlDS and asthma, neuropathies e.g. Alzheimer's disease and parkinson's disease. The present sequence represents a polynucleotide form part of the printed specification but was obtained in electronic formed directly from USPPO at sequence. html?DocID=06500938B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ovarian cancer-related DNA #326 with altered ovarian cancer expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LyskrgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ProThrArgArgLyBProGlyLyBCysProValThrTyrGlyGlnCysLeuMetLeuMen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGTGCATGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19 ATGAAGTCCAGCGGCCTCTTCCCCCTTCCTGGTGCTTGCCTGGGAACTCTGGCACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ccaacaaggaggaagccrgggaagrgcccagrgacrrarggccaargrragargcrraac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysGysGysGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ds; gene; ovarian tumor; BRCA-1-like; BRCA-2-like; non-BRCA-like;
                                                                                                                                                                                                                                                                                                                      Other;
 polynucleotide probes comprising a sequence selected
                                                                                                                                                                                                                                                                                                                                                              594
132
0
0
0
                                                                                                                                                                                                                                                                                                                      Sequence 594 BP; 132 A; 156 C; 155 G; 151 T; 0 U; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-613-105-2 (1-132) x ACA56673 (1-594)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP
                                                                                                                                                                                                                                                                                                                                                                2.08e-58
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADK61171 standard; DNA; 594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                              Score:
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                         ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                            | ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                  CCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 378
                                                                                                                                                                                                    138
                                                                                                                                                                                                                                                              139 GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG 198
                                                                                                                                                                         40
                                                                                                                                                                                                                                  9
                                                                                                                 20
                                                                                                                                           78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; probe; 88; array element; Parkinson's disease;
signalling pathway population; cancer; adenocarcinoma; leukaemia;
immunopathy; AIDS; asthma; neuropathy; Alzheimer's disease; microarray.
                                                                                                                                                                                                                                                                                                                                                                   CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC
                                                                                                                                                                         TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer
                                                                                                                                                                                                    79 resecretedandecrereganastecricanascresasterecretecretecrasanarer
                                                                                                                                                                                                                               41 AlaGinCysLeuArgTyrLysLysProGluCysGlnSsrAspTrpGlnCysProGlyLys
                                                                                                               MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                              ATGAAGTCCAGCGGCCTCTTCCCCGTTCCTGGTTGCCTTGCCCTGGGAACTCTGGCACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to a combination which, comprises a number of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        as array elements
a number of target
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NO 1271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human signalling pathway polynucleotide probe SEQ ID
132
0
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGTGTGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 414
 Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Combination of polynucleotide probes, useful a microarray for monitoring the expression of a
                                                          Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; SEQ ID NO 1271; 65pp; English
                                                                                    x ADF81611 (1-594)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98US-00016434.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          standard; cDNA; 594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98US-00016434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (INCY-) INCYTE GENOMICS INC.
 762.00
100.00$
100.00$
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Au-Young J, Seilhamer JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-352189/33
                                                                                    US-10-613-105-2 (1-132)
            Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    polynucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US6500938-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-JAN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-DEC-2002.
                                                                                                                                                                                                                                                                                                           199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACA56673;
                                                                                                                                              19
                                                                                                                                                                                                                                                                                                                                                                                 259
                                                                                                                                                                          53
                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                    81
                                                                                                                                                                                                                                                                                                                                                                                                            101
                                                                                                                                                                                                                                                                                                                                                                                                                                         319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACA56673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 16
ACA56673
                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                 ద
                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                 ઠે
                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                 ઠ
                                                                                                                                                                                                                                                         요
                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
```

20 78 40 198

9

258 100

80

```
format from WIPO.
                                                                                                                                                         ADP65640;
                                                                                            RESULT 18
                                                                                                                                            셤
                            8
                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to a method of classifying an ovarian tumor as a BRCA-1-like or BRCA-2-like tumor by: (1) determining a pattern of expression in the ovarian tumor of several markers given in the specification, and (2) comparing a similarity of the pattern of expression of the markers in the ovarian tumor to a pattern of expression of the markers in the ovarian tumor to a pattern of EXPR-2-like or non-BRCA-like tumor. The method is useful for classifying an ovarian tumor as a BRCA-1-like or BRCA-2-like or non-BRCA-like tumor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This sequence corresponds to an ovarian cancer -related gene having an altered pattern of expression in ovarian cancer. (Note: The sequence data for this patent did not form part of the printed specification but was obtained in electronic format from WIPPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCT 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ccaacaaggaggaagccrgggaagrgcccagrgacrrarggccaargrrrgargcrraac 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                    Classifying an ovarian tumor as a BRCA-1-like or BRCA-2-like or non-BRCA-11ke tumor by determining a pattern of expression in the ovarian tumor of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AlaGInCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Argandrecadedeceretreeerreergergerreeerreeganerergedacer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 MetlyeSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 594 BP; 132 A; 156 C; 155 G; 151 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          594
132
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                     Disclosure; SEQ ID NO 341; 137pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ftp.wipo.int/pub/published_pct_sequences)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels:
Gaps:
                                                                                                                                                                                         (USSH ) US DEPT HEALTH & HUMAN SERVICES.
(SLOK ) SLOAN KETTERING INST CANCER RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-613-105-2 (1-132) x ADK61171 (1-594)
gene expression; primer; cancer,
                                                                                                                                                                                                                                           Liu ET;
                                                                                                                            13-FEB-2003; 2003WO-US004688.
                                                                                                                                                         13-FEB-2002; 2002US-0357031P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2.08e-58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             in electronic
                                                                                                                                                                                                                                         Jazaeri AA, Boyd J,
                                                                                                                                                                                                                                                                       WPI; 2003-689589/65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity:
                                                                                                                                                                                                                                                                                                                        like tumor by de
several markers.
                                                              WO2003068054-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
                                                                                            21-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local
```

셤

8

요

ઠે

g

ò

유

ò

셤

ò

```
The invention relates to a novel method for diagnosing and analysing autoimmune disease or arthritides. The method comprises obtaining a autoimmune disease or arthritides. The method comprises obtaining a patient is a gene expression using the mRNA that results in a gene expression signature of the mRNA, and using that cor arthritides in the patient, where gene expression of at least 60% of cor arthritides in the patient, where gene expression of at least 60% of the genes correlates with that of the gene expression of at least 60% of cor arthritides in the treatment of rheumatoid arthritis; identification of corner than a mouse; diagnosis of rheumatoid arthritis; identification of array or gene chip, specific for rheumatoid arthritis; diagnosis or array or gene chip, specific for rheumatoid arthritis; acreening the efficacy of a candidate drug in vitro for the treatment of collagence of authorimune disease or rheumatoid arthritis; acreening the compositions of the invention have the following activities: immunosuppressive, antirheumatic, antiantition are useful for antipout, antinflammatory, dermatological, and immunomodulatory. The disease or arthritis arthrition are useful for methods and compositions of the present invention are useful for an entering and treating antirelyments.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 diagnosing and treating autoimmune disease or arthitides, such as rheumatoid arthritis, lupus, ankylosing spondylitis, fibrositis, fibromyalgia, osteoarthritis, gout, juvenile rheumatoid arthritis, and an immune disease caused by an infectious agent. This polynucleotide represents a DNA sequence relating to the genes used in the analysis and treatment of autoimmune diseases or arthritides. Note: This sequence is not shown in the specification. It has been supplied in an electronic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       autoimmune disease; arthritide; gene expression analysis; rheumatic; arthumatoid arthritis; ocllagen-induced; immunosuppressive; antirheumatic; antiarthritic; osteopathic; antigout; antiinflammatory; dermatological; immunomodulatory; lupus; ankylosing spondylitis; Ribrositis; fibromyalgia; osteoarthritis; gout; juvenile rheumatoid arthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Diagnosing and analyzing autoimmune disease using gene expression profiles and microarray technology, useful for diagnosing and treating rheumatoid arthritis, lupus, fibrositis, osteoarthritis, fibromyalgia and
319 CCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human mRNA for antileukoprotease (ALP) from cervix uterus DNA.
                                                                                                   (CHIL-) CHILDREN'S HOSPITAL MEDICAL CENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page; 56pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                              BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-OCT-2002; 2002WO-US035433.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-OCT-2001; 2001US-0336220P
                                                                                                                                                                                                                                                                                                                                                                                                              ADP65640 standard; DNA; 594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hirsch R, Thorton SL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-712740/67.
GENBANK; X04470.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             immune; de; human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2003072827-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-SEP-2003
```

```
Human; probe; ss; receptor-like polypeptide; transducing polypeptide; effector-like polypeptide; cancer; immunopathology; neuropathology; drug development; toxicology; carcinogenicity; signalling pathway polypeptide; adrenal gland; bladder; bone; bone marrow; brain; breast; cervix; tumour; immunopathology; diabetes; pancreatitis; osteoporosis; ulcerative colitis; neuropathology; dementia; amnesia; epilepsy; Alzheimer's disease; depression.
                                                                                                                                                                                                                                                                                                                                                                                  ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                      TGGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCT 138
                                                                                                                                                                                                                                                              198
                                                                                                                                                                                                                                                                                                           258
                                                                                                                                                                                                                                                                                                                                  ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                          318
                                                                                                                                                                                                                                                                                                                                                                                                          CCCCCCAATTTCTGTGAGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 378
                                                                                                                                                                                                                                       9
                                                                                                                                                                                        40
                                                                                                                                                                                                                                                                                     80
                                                                                                                                          20
                                                                                                                                                                 78
                                                                                                                                                       ATGAAGTCCAGCGGCCTCTTCCCCTTCCTGGTGCTGCCTTGCCCTGGGAACTCTGGCACCT
                                                                                                                                                                                                                                                    AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCTTGACACCCCCAAAC
                                                                                                                                                                                                                                                                                                                                                       CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC
                                                                                                                                          MetlysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                        TrpAlaValGluGlySerGlyLyBSerPheLyBAlaGlyValCysProProLysLysSer
                                                                                                                                                                                                                                      AlaGinCysLeuArgTyrLysLysProGluCysGinSerAspTrpGinCysProGlyLys
                                                                                                                                                                                                                                                                                     LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn
U; 0 Other;
                                  594
0 0
0 0
                                                                                                                                                                                                                                                                                                                                                                                                                               MetCygGlyLygSerCygValSerProValLygAla 132
                                 Length:
Matches:
Conservative:
Mismatches:
0
Ë
G; 151
                                                                                Indel8:
                                                                                            Gaps:
                                                                                                                   US-10-613-105-2 (1-132) x ADP65640 (1-594)
 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           polynucleotide probe #1271
ΰ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98US-00016434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-NOV-2002; 2002US-00305720
                                 2.08e-58
762.00
100.00%
100.00%
BP; 132 A; 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADIS6469 Btandard; DNA; 594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (INCY-) INCYTE GENOMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Seilhamer JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                            Score:
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2004010136-A1.
Sequence 594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-JAN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Au-Young J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15-JAN-2004.
                       Alignment Scores
                                                                                                                                                                                                                                                                                                                                                                                                          319
                                                                                                                                                                                                                                                                                                                                                                                                                                                      379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADI56469;
                                                                                                                                                                  13
                                                                                                                                                                                                                 79
                                                                                                                                                                                                                                        41
                                                                                                                                                                                                                                                               139
                                                                                                                                                                                                                                                                                                                                                          259
                                                                                                                                                                                         21
                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                             199
                                                                                                                                                                                                                                                                                                                                    81
                                                                                                                                                                                                                                                                                                                                                                                  101
                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human
                                   ..
90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              요
                                                                                                                                                             g
                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                          ઠે
                                                                                                                                                                                        Ś
                                                                                                                                                                                                           g
                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                  ठ
                                                                                                                                                                                                                                                                                                                                                                                  ò
```

```
The invention relates to a composition of polynuclectide probes comprising first polynuclectide probes comprising at least a portion of a gene encoding a receptor-like polypeptide, second polynuclectide probes comprising at least a portion of a gene encoding at least a portion of a gene encoding an effector-like polypeptide. The probes of the composition are useful as array elements in a microarray for monitoring the expression of target polynuclectides. The microarray for monitoring the expression of target polynuclectides. The microarray for monitoring che expression of target polynuclectides. The microarray is useful in the diagnosis and treatment of cancer, an immunopathology or a contropathology. It can also be used for drug discovery and development, toxicological and carcinogenicity studies, forensics or pharmacogenomics. Microarrays can also be used for monitoring the progression of diseases that may be associated with the altered expression of signalling pathway polypeptides. The composition can also be used to purify a subpopulation of makNa, cDNNa, or genomic fragments in a sample. The expression profile is also useful for the diagnosis and treatment of cancer, e.g. cancers of the adrenal gland, bladder, bone, bone marrow, brain, breast or cervix, an immunopathology, e.g. Albs, disbetes, pancreatitis, osteoporosis or ulcerative colitis, or a neuropathology, e.g. dementia, amnesia, chims patent did not form part of the printed specification but was for obtained in electronic format directly from USPTO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               78
                                     New composition comprising polynucleotide probes, useful as array elements in a microarray for monitoring the expression of target polynucleotides or purifying a subpopulation of mRNAs, cDNA, or genomic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGAAGTCCAGCGGCCTCTTCCCCTTCCTGGTGCTGCTTGCCCTGGGAACTCTGGCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              resecriciosaasecreresaaserecricaaaseresaserererererererererere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LysArgCysCysProAspThrCysGly1leLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLyll
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AlaGinCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 594 BP; 132 A; 156 C; 155 G; 151 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          594
0 0 0 0 0 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps:
                                                                                                                                Claim 6; SEQ ID NO 1271; 73pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (1-594)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 segdata.uspto.gov/seguence.html.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-613-105-2 (1-132) x ADI56469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2.08e-58
762.00
100.00%
100.00%
WPI; 2004-090520/09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
DB:
 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
```

MetCygGlyLygSerCygValSerProValLygAla 132

121

ò

임

us-10-613-105-2.rng

142

9

202 80 262

322 120

ACC50296 RESULT

```
81 ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                 83 TGGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCT
                                                                        263 CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC
                                                                                                                                                                                                                                                              ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly
                                                    41 AlaGinCysLeuArgTyzLysEysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                        LysArgCysCysProAspThrCysGly1leLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cytostatic; gene therapy; vaccine; ovarian cancer; diagnosis; post-operative chemotherapy; radiation therapy; tumour prognosis; pre-cancerous lesion detection; ds; gene.
                                                                                                                                                                                                                                                                                                                                  MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                    ATGTGTGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ovarian cancer-associated transcript #78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                       BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (EOSB-) EOS BIOTECHNOLOGY INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-JUN-2001; 2001US-0299234P.
27-AUG-2001; 2001US-0315287P.
05-SEP-2001; 2001US-0317544P.
13-NOV-2001; 2001US-0350666P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2002US-0372246P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-JUN-2002; 2002WO-US019297
                                                                                                                                                                                                                                                                                                                                                                                                                                       ADB80589 standard; DNA; 598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-167431/16.
P-PSDB; ADB80590.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mack DH, Gish KC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO2002102235-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ното варіеля
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27-DEC-2002
                                                                                                                          61
                                                                                                                                                                                                                                                               101
                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADB80589;
                                                                                                                                                                                                                                                                                                                                                                                                        21
                                                                                                                                                                                                                                                                                                                                                                                                                       ADB80589
                                                                                                                                                                                                                                                                                                                                                                                                      RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                  셤
                                                                                                                                                   요
                                                                                                                                                                                           à
                                                                                                                                                                                                                             윤
                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention describes a method for assessing whether a patient is afflicted with breast cancer. The method comprises comparing the level of expression of a marker (gene/polypeptide see ACCS0076 to ACCS0334 and ABR47386 to ABR4738 in a patient sample and the normal level of expression of the marker in a control non-breast cancer sample, where a patient sample and the normal level of expression of the marker in the patient sample and the normal level is an indication that the patient is afflicted with breast cancer. The breast cancer associated sequences from the present invention have cytostatic activities and can be used in gene therapy. The method is useful for diagnosing and treating breast cancer. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Breast cancer diagnosis or treatment by comparing the level of exproof a marker in a patient sample with that in the control non-breast cancer sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Meyers R
Aills GB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mille
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gannavarapu M, Glatt K, Hoersh S, Kamatkar S;
Monahan JE, Myer V, Wang Y, Xu Y, Zhao X, N
Hortobagyi GN, Pusztai L, Meric F, Sahin A, Mi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 598 BP; 134 A; 157 C; 156 G; 151 T; 0 U; 0 Other;
                                                                                                                                                                                                88.
                                                                                                                                                                                             Human; breast cancer; cytostatic; gene therapy; gene;
                                                                                                                                                            Breast cancer associated cDNA sequence SEQ ID NO:431.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; SEQ ID NO 431; 128pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (1-598)
                                                       BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-613-105-2 (1-132) x ACC50296
                                                                                                                                                                                                                                                                                                                                                                  21-JUN-2001; 2001US-0299887P.
27-JUN-2001; 2001US-0301572P.
18-JUL-2001; 2001US-0306501P.
25-SEP-2001; 2001US-0362502P.
05-MAR-2002; 2002US-0362585P.
                                                       ACC50296 standard; cDNA; 598
                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-MAY-2002; 2002US-0380391P
                                                                                                                                                                                                                                                                                                                                    21-JUN-2002; 2002WO-US019669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (MILL-) MILLENIUM PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2.1e-58
762.00
100.00%
100.00%
                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              , Monahan JE,
Hortobagyi GN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-210381/20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                               WO2003004989-A2
                                                                                                                          12-JUN-2003
                                                                                                                                                                                                                                 Ното варіенв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                                                                                                                                                                  16-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mertens M,
Bast RC, F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lillie J.
                                                                                        ACC50296,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..
9
```

```
The invention relates to a method of detecting an ovarian cancer-
associated transcript in a cell from a patient, by contacting a
pological sample from the patient with a polymorieotide that selectively
hybridizes to a sequence at least 80% identical to any of one of 80
nucleic acid sequences given in the specification. The method is useful
Detecting an ovarian cancer-associated transcript in a cell from a patient, comprises contacting a biological sample from the patient with polynucleotide that hybridizes to an ovarian cancer gene.
                                                                                                                                                                                                                                                          Claim 10; Page 327; 332pp; English.
```

82

21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer 40

8

ò

```
autoimmune disease; arthritide; gene expression analysis; rheumatoid arthritis; collagen-induced; immunosuppressive; antirheumatic; antiarthritic; osteopathic; antigout; antiinflammatory; dermatological; immunomodulatory; lupus; ankylosing spondylitis; Fibrositis; fibromyalgia; osteoarthritis; gout; juvenile rheumatoid arthritis; immune; ds; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGAGATGTTGTTGTTGTTGTGGCATCAAATGCCTGGATCGTTGAAAC 262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 382
                                                                                                                                                                                                                                                                                                                                                                                                                                       142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC 322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                20
                                                                                                                                                                                                                                                                                                                                                                                                            40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   80
                                                                                                                                                                                                                                                                                                                                                                             82
in diagnosing ovarian cancer and in identifying and using agents and/or targets that inhibit ovarian cancer. The mucleic acid molecule, polypeptide and the antibody may also be used in detecting ovarian cancers, monitoring and early detection of relapse following treatment, monitoring response to therapy, selecting patients for post-operative chemotherapy or radiation therapy, in selecting mode of therapy, detection of the processing and as vaccines. This sequence corresponds to one of the nucleic acids
                                                                                                                                                                                                                                                                                                                                             MetLy8SerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCCAGTGCCAGGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AlaGinCysLeuArgTyrLysLysProGinCysGinSerAspTrpGinCysProGiyLys
                                                                                                                                                                                                                                                                                                                                                                                                       TrpAlaValGludlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn
                                                                                                                                                         Sequence 598 BP; 134 A; 157 C; 156 G; 151 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human secretory leukocyte protease inhibitor DNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                            for the detection method of the invention.
                                                                                                                                                                                                                                                                                Gaps:
                                                                                                                                                                                                                                                                                                                x ADB80589 (1-598)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ВЪ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADP65076 standard; DNA; 598
                                                                                                                                                                                                    2.1e-58
762.00
100.00$
100.00$
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                              US-10-613-105-2 (1-132)
                                                                                                                                                                                                                                                   Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO2003072827-A1
                                                                                                                                                                                                                                   Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                       Alignment Scores
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    383
                                                                                                                                                                                                                                                                                                                                                                                                                                       83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADP65076;
                                                                                                                                                                                                                                                                                                                                                                             23
                                                                                                                                                                                                                                                                                                                                                                                                            21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                               Best Local S.
Query Match:
DB:
                                                                                                                                                                                                         ..
90
                                                                                                                             used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                  ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 요
                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ሯ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
```

```
The invention relates to a novel method for diagnosing and analysing autoimmune disease or arthritides. The method comprises obtaining a C autoimmune disease or arthritides. The method comprises obtaining a c patient sample conteaining mRNA, analysing gene expression using that that results in a gene expression signature of the mRNA, and using that c comprises: a treatment of the gene expression of at least 60% of the genes correlates with that of the gene expression of at least 60% of the genes correlates with that of the gene expression of a least 60% of the genes correlates with that of the gene expression of a least 60% of the genes correlates with that of the gene expression of a least 60% of the genes for targeting in the treatment of the invention of array or gene chip, specific for fleumatoid arthritis; diagnosis or array or gene chip, specific for fleumatoid arthritis; diagnosis or analyses of autoimmune disease or rheumatoid arthritis; accening the efficacy of a candidate drug in vitro for the treatment of collagentinduced arthritis. The compositions of the invention have the following activities: immunosuppressive, antirheumatic, antiantides, such as activities: immunosuppressive, antirheumatic, antiantides, such as activities and compositions of the present invention are useful for methods and compositions of the present invention are useful for diagnosing and treating autoimmune disease or arthritides, such as the rheumatoid arthritis, lupus, ankylosing spondylitis fibromytalgia, osteoarthritis, gout, juvenile rheumatoid arthritis, and educing to the genes used in the analysis and treatment of autoimmune disease caused by an infectious agent. This sequence is immune disease caused by an infectious agent. This polymulescitie, represents a DNA sequence relating to the genes used in the analysis and creatment of autoimmune diseases or arthritides. Note: This sequence is an entered and an analysis and treatment of autoimmune diseases or arthritides. Note: This sequence is an entered and an an entered a
                                                                                                                                                                                                                                                                                                                            Diagnosing and analyzing autoimmune disease using gene expression profiles and microarray technology, useful for diagnosing and treating rheumatoid arthritis, lupus, fibrositis, osteoarthritis, fibromyalgia and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 598 BP; 134 A; 157 C; 156 G; 151 T; 0 U; 0 Other;
                                                                                                                     (CHIL-) CHILDREN'S HOSPITAL MEDICAL CENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure, Page, 56pp, English.
31-OCT-2002; 2002WO-US035433.
                                                         31-OCT-2001; 2001US-0336220P
                                                                                                                                                                              Hirsch R, Thorton SL;
                                                                                                                                                                                                                                       WPI; 2003-712740/67
GENBANK; NM 003064.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      format from WIPO
```

```
TGGGCTGTGGAAGGCTCTTCAAAGCTGGAGTCTGTCTCCTCCTAAGAAATCT 142
                                                                                                              20
                                                                                                                                   82
                                                                                                                                                           6
                                                                                                                                                                                                     9
                                                                                                             MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                   AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                   23 ArgaAgrecaGeGeCererrecerrecrasseseriserrasesagaAcrerGeCacer
                                                                                                                                                          TrpAlaValGluGlySerGlyLy8SerPheLy8AlaGlyValCy8FroProLy8Ly8Ser
          598
0000
0000
        Length:
Matches:
Conservative:
Mismatches:
                                                                                         (1-598)
                                                                                        US-10-613-105-2 (1-132) x ADP65076
                      762.00
100.00%
100.00%
100.00%
            2.1e-58
                                            Similarity:
                                Percent Similarity:
Alignment Scores:
                                                                                                               Н
                                                                                                                                                           21
                                                                                                                                                                                83
                                                                                                                                                                                                        41
                                                                                                                                                                                                                                                                        203
                                                                                                                                                                                                                                                  61
                                                       Query Match:
DB:
            ..
80
                        Score:
```

8 В ò 셤 ò 셤 ઠે g

```
the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (GETH ) GENENTECH INC.
                                                                                                                                                                                     Similarity:
cal Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2004028479-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                              Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       383
                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                               Best Local Si
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT
88888888888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                       Q
                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention describes a method for the use of genes and proteins for diagnosing ovarian cancer and/or a likelihood for survival cor recurrence of the disease, where the expression of genes and proteins is up-regulated and down-regulated or associated with the occurrence or recurrence of a specific cancer sub-type. Also described: (1) detecting an ovarian cancer in a human or animal subject being tested; (3) detecting an ovarian cancer in a human or animal subject being tested; (3) detecting an ovarian cancer in a human or animal subject being tested; (3) detecting an ovarian cancer; and (6) an assay device for use in the diagnosis of row an ovarian cancer; and (6) an assay device for use in the diagnosis of ovarian cancer comprising polynucleotides or antibodies immobilised to a solid phase, where each of the antibodies binds to a gene given in the specification and each of the antibodies binds to a solid phase, where each of the antibodies binds to a solid phase, where each of the antibodies binds to a solid phase, where each of the antibodies binds to a solid phase, where each of the antibodies binds to a solid phase, where each of the antibodies consists of a polypoptide also given in the specification and each of the antibodies consists of a polypoptide dealso given in the reatment of ovarian cancer associated sequence has cytostatic activity, and can be used in gene therapy. An ovarian cancer section of a medicament for the treatment of ovarian cancer or for the preparation of a medicament for the treatment of ovarian
            CCAACAAGGAAGCACTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC 322
                                                  ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                            CCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 382
                                                                                                                                                                                                                                                                                      ovarian cancer; ovarian cancer-associated transcript; cytostatic; gene therapy; human; secretory leukocyte protease inhibitor; chromosome 20; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Use of genes and proteins for diagnosing ovarian cancer and/or likelihood for survival or recurrence of the disease.
                                                                                                     Human SLPI encoding cDNA SEQ ID NO:25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 2; SEQ ID NO 25; 447pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  O'brien
                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                    /product= "SLPI"
                                                                                                                                                                                     ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (GARV-) GARVAN INST MEDICAL RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-SEP-2002; 2002AU-00951346.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   05-SEP-2003; 2003WO-AU001166.
                                                                                                                                                                                    ADL26771 standard; cDNA; 598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sutherland R, Henshall S,
                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                          ď
                                                                                                                                                                                                                                                                                                                                                                                         23. .421
/*tag= 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2004-315574/29.
P-PSDB; ADL26772.
                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2004022778-A1
                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                         03-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-MAR-2004
                                                                                                                                                                                                                ADL26771;
                      263
                                                                                                                                383
                                                  101
                                                                            323
                                                                                                     121
                                                                                                                                                            RESULT 23
                                                                                                                                                                         셤
                  셤
                                                                          g
                                                                                                     ठ
                                                 8
```

```
100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ccccccarrrcrgrgagarggarggccagrgcaagcgrgacrrgaagrgrrgcargggc 382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             40
cancer. The ovarian cancer that is diagnosed is an epithelial ovarian cancer selected from serous ovarian cancer, non-invasive ovarian cancer, mixed phenotype ovarian cancer, mucinous ovarian cancer, endometrial ovarian cancer, papillary serous ovarian cancer, Serous ovarian cancer, Benner cell ovarian cancer, papillary serous ovarian cancer, Brenner cell or undifferentiated adenocarcinoma. The present sequence encodes human secretory leukocyte protease inhibitor (SLPI), which is located on chromosome 20 and is used in the exemplification of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     143 GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ProThrArgArgLy8ProGlyLy8Cy8ProValThrTyrGlyGlnCy8LeuMetLeuAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21 TrpAlaValGluGlySerGlyLy8SerPheLy8AlaGlyValCy8ProProLy8Ly8Ser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 83 resecreresakasecreresakastecricakasecresakereteretereterakakaret
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   41 AlaGlnCysLeuArgTyrLysLysBroGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ccaacaagaagagaagagaagagcccagagagcrrarggccaargrragagcrraac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ds; gene; antipsoriatic; gene therapy; psoriasis; diagnosis.
                                                                                                                                                                                                                                              Sequence 598 BP; 134 A; 157 C; 156 G; 151 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                            598
132
000
000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Archereceaaarcerecerricecerereaaacr 418
                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-613-105-2 (1-132) x ADL26771 (1-598)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Antipsoriatic cDNA sequence #162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADN03925 standard; cDNA; 598 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-SEP-2002; 2002US-0414006P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-SEP-2003; 2003WO-US030907
                                                                                                                                                                                                                                                                                                                            2.1e-58
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-JUL-2004 (first entry)
```

```
ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match:
DB:
 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                               TGGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCT 142
                                                                                                                                                                                                                                                                                                                                                                                                                                                      262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ccccccarrrcrgrgargargaccagrgcaagcgrgacrrgaagrgrrgcarggg 382
                                                                                                                                                                                                                                                                                                                                                   40
                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                   80
                                                                                                                                                                                                                                                                                                                               82
                                                                                                                    The invention relates to novel polynucleotide and polypeptides for treating psoriasis or a sequence having at least 80% identity to the above sequences. The nucleic acid is useful for preparing a composition for diagnosing or treating psoriasis in a mammal. This sequence corresponds to one of the polynucleotides of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                      LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn
 Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                           AlaGinCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCAACAAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCTAAC
                                                                                                                                                                                                                                                                                                          MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                   TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGAGATGTTGTCCTGACACTTGTGGCCATCAAATGCCTGGATCCTGTTGACACCCCCAAAC
                                                                                                                                                                                                                                                                                                                                ATGAAGTCCAGCGCCTCTTCCCCTTCCTGGTGCTGCTTGCCCTGGGAACTCTGGCACT
                                                           New PRO nucleic acid'or polypeptide, useful for preparing a pharmaceutical composition for diagnosing or treating psoriasis in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Expressed sequence tag; EST; human; ovarian tumor; anticancer;
Schoenfeld J, Williams PM,
                                                                                                                                                                                   Sequence 598 BP; 134 A; 157 C; 156 G; 151 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human ovarian tumor cDNA library derived EST fragment
                                                                                                                                                                                                                  598
132
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Arcricicada Arccricitric con Grander
                                                                                                                                                                                                                                                                    Gaps:
                                                                                                  SEQ ID NO 319; 3069pp; English
                                                                                                                                                                                                                                                                                        US-10-613-105-2 (1-132) x ADN03925 (1-598)
  Jackman J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAZ77546 standard; cDNA; 599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gene therapy; treatment; ss
                                                                                                                                                                                                                 2.1e-58
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
Clark H,
                              WPI; 2004-305105/28
                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
                                        P-PSDB; ADN03926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                        Alignment Scores:
 s,
                                                                                                   Claim 1;
                                                                                                                                                                                                                                                                                                                                23
                                                                                                                                                                                                                                                                                                                                                                       83
                                                                                                                                                                                                                                                                                                                                                                                            41
                                                                                                                                                                                                                                                                                                                                                                                                                143
                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                       203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAZ77546;
                                                                                                                                                                                                                                                                                                                                                   21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
Bodary
Wu TD;
                                                                                                                                                                                                                                                          Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
```

```
This invention describes novel nucleic acid (cDNA) sequences (A) which have anticancer activity and are highly expressed in ovarian tumor tissue (and some also in testis and breast canner tissue). The products of the invention can be used for gene theasy. (A) are used (i) for recombinant expression of polypeptides (B) and (ii) to isolate complete genes. (B) are used (i) to identify agents suitable for treatment of ovarian cancer; (ii) directly for treating this form of cancer (including expression from gene therapy vectors) and (iii) for generation of specific antibodies. (A) are identified by assembling ESTS (expressed sequence tags) from a particular tissue type before comparison of expression patterns. This are blown a significantly longer fragment of the gene to be revealed, so should reduce the number of failures associated with the fact that ESTS from different libraries may represent different parts of the same cunnown gene, discorting the estimated frequency of occurrence in a particular tissue. Ad277450-Z77572 represent the human ovarian tumor CDNA library derived EST fragments represented in AAY76505-Y76638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    194 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCCAAAC 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14 ATGAAGTCCAGCGGCCTCTTCCCCTTCCTGGTGCTTGCCCTGGGAACTCTGGCACCT 73
                                                                                                                                                                                                                                                                     ü
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LyshrgCysCysProAspThrCysGly1leLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProLysLysSer
                                                                                                                                                                                                                                                                  Dahl
                                                                                                                                                                                                                                                                                                                                                                                d some other, ca
                                                                                                                                                                                                                                                                     Pilarsky C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 599 BP; 142 A; 153 C; 154 G; 150 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                             New nucleic acid sequences expressed in ovarian, and tissues, and derived polypeptides, for treatment of o identification of therapeutic agents.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        599
0000
0000
                                                                                                                                                                                                                                                                     Schmitt A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                               GENOMFORSCHUNG MBH
                                                                                                                                                                                                                                                                     Hinzmann B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-613-105-2 (1-132) x AAZ77546 (1-599)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 3; Page 221; 310pp; German.
                                                                                                       98DE-01017557
                                                                                                                                                           98DE-01017557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2.11e-58
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                  Rosenthal A, Specht T,
                                                                                                                                                                                                                  (META-) METAGEN GES
                                                                                                                                                                                                                                                                                                                         WPI; 1999-591920/51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
DE19817557-A1
                                                                                                    09-APR-1998;
                                                                                                                                                           09-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
Pred. No.:
                                                21-OCT-1999
```

40

235

9

295 100

80

120 415

```
ccaacaagaagaccraagaagracccaaraacracraaraaccaararraaraaracrraac 355
                     116 TGGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCT
                                                                          176 GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG
 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysSer
                                                      41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                         LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn
                                                                                                                                       236 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCAAAC
                                                                                                                                                                   ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuMsn
                                                                                                                                                                                                                         ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly
                                                                                                                                                                                                                                                     356 CCCCCCAATTTCTGTGAGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
                                                                                                                                                                                                                                                                                 MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                 ATGIGLEGGAAATCCTGCGTTTCCCCTGTGAAAGCT 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human ovarian cancer DNA marker #20587.
                                                                                                                                                                                                                                                                                                                                                                  ADL62375 standard; DNA; 1084 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000US-0191031P.
2000US-0207124P.
2000US-0211940P.
2000US-0216820P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21-MAR-2001; 2001WO-US009126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200170979-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-JUL-2000;
21-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                          20-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-SEP-2001
 21
                                                                                                               61
                                                                                                                                                                     81
                                                                                                                                                                                               296
                                                                                                                                                                                                                           101
                                                                                                                                                                                                                                                                                                            416
                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                              ADL62375;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cancer consed to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (MILL-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Lee J,
                                                                                                                                                                                                                                                                                                                                       RESULT 27
                                                                                                                                                                                                                                                                                                                                                        ADL62375
                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                     요
                                                       8
                                                                           g
                                                                                                             ઠે
                                                                                                                                      g
                                                                                                                                                                     ò
                                                                                                                                                                                         g
                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAH57161 to AAH57576 represent cell and tissue specific polynucleotide sequences (I). (I) can have cytostatic, immunomodulatory and neuroprotective activities, and can be used in gene therapy. (I) and proteins (II) encoded by then are used in high throughput screening assays to select DNA molecules, RNA molecules, peptides nucleic acids, mimetics, peptides, proteins, agonists, antagonists, antibodise or their fragments, immunoglobulins, inhibitors, drug compounds and pharmaceutical agents. Expression of (I) in a sample indicates the differentiation of embryonic stem cells into a tissue selected from brain, heart, kidney, liver, lung, skeletal muscle or pancreatic tissues. (I) and (II) are used to produce an expression profile that defines a metabolic or developmental process, treatment, condition, disease or disorder. The condition disease or disorder. The treatments and for investigating a predisposition to a disorder where the gene is associated with a cancer, immunopathology or neuropathology
                                                                                                                                                                                                            liver, uterus; ovary; stomach; intestine; kidney; pancreas; ss; metabolic disease; developmental disease; cytostatic; immunomodulatory; neuroprotective; gene therapy; cancer; immunopathology; neuropathology.
                                                                                                                                                                                               Human; tissue specific; diagnosis; brain; heart; skeletal muscle; lung;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New cell and tissue specific polynucleotides useful for diagnosis, prognosis or monitoring of treatments for disorders where the gene is associated with a cancer, immunopathology or neuropathology.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 636 BP; 160 A; 159 C; 163 G; 154 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   636
0
0
0
0
                                                                                                                                                                     Human lung cell specific cDNA sequence SEQ ID NO:291.
Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                         Watson GA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; Page 217; 327pp; English.
                                                                                    ВР
                                                                                                                                                                                                                                                                                                                                                                                   99US-0163508P
                                                                                    AAH57451 standard; cDNA; 636
                                                                                                                                                                                                                                                                                                                                                       02-NOV-2000; 2000WO-US030396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2.26e-58
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                             (INCY-) INCYTE GENOMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                         Seilhamer JJ,
                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-291057/30.
                                                                                                                                                                                                                                                                                                 WO200132927-A2
                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                   04-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                         F,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gnment Scores:
                                                                                                                                         10-SEP-2001
                                                                                                                                                                                                                                                                                                                           10-MAY-2001
                           374
                                                                                                               AAH57451;
  121
                                                                                                                                                                                                                                                                                                                                                                                                                                          Sornasse
                                                                       AAH5745
                                                        RESULT
                                                                                    ठ
```

```
The invention relates to nucleic acid markers which are overexpressed in ovarian cancer cells as compared to their expression in normal (i.e. non-acacerous) ovarian cells. The invention also relates to polypeptides encoded by the markers, antibodies that selectively bind to the polypeptides, a method of inhibiting ovarian cancer in a patient at risk of developing ovarian cancer involving inhibiting expression of a gene corresponding to a marker of the invention and a method of treating a patient affiliated with ovarian cancer comprising providing to cells of the patient an antisense oligonucleotide complementary to a marker of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel isolated nucleic acid molecules (markers) overexpressed in ovarian cancer cells as compared to their normal non-cancerous ovarian cells are used to characterize stage, grade, histological type of ovarian cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; SEQ ID NO 20587; 106pp; English
                                                                                                                                                             MILLENNIUM PREDICTIVE MEDICINE INC.
2000US-0220661P
2000US-0257672P
                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-611502/70.
```

Argaagreeagedecrerrecerrecresrecreerrecerregaaacrergeaacrer 115

유 ઠે

MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro

JS-10-613-105-2 (1-132) x AAH57451 (1-636)

Indels: Gaps:

Percent Similarity: Best Local Similarity

Query Match: DB:

Human NOV8d gene SEQ ID NO:91.

```
invention. The markers are useful for assessing if a patient is afflicted with ovarian cancer, which involves comparing the level of expression of a marker in a control non-ovarian cancer sample. A difference between the expression levels indicates ovarian cancer. The level of expression of a marker corresponds to a secreted protein or to a transcribed comparing the presence in the sample, a protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein Alternatively, the level of expression of the marker is assessed by detecting the presence of a transcribed or protein or protein comprising the marker, under stringent conditions. The marker is also used for monitoring the progression of ovarian cancer in a patient sample at a first point in time, repeating the method at a subsequent time and comparing the level of expression. The method at a subsequent time and comparing the level of expression. The method at a subsequent time and comparing the level of expression. The method at a subsequent or using an ovarian tissue sample. A composition comprising a marker. This sequence represents a human ovarian cancer DNA marker of the invention. Note: The sequence data for this patent did not form part of the muthod is the print of the muthod and in the control of the print of the marker and in the control of the marker and the control of the print of the print of the print of the print of the print of the print of the print of the print of the print of the print of the print of the print of the print of the print of the print of the print of the print of the print of the print of the print of the print of the print of the print of the print of the print of the print of the print of the print of the print o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         from WIPO at ftp.wipo.int/pub/published_pct_sequences.
```

Sequence 1084 BP; 267 A; 264 C; 329 G; 220 T; 0 U; 4 Other;

```
CCAACAAGGAGGAAGCCTGGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAAC 368
                                                                                                                                                                                                                                                                                                                                                                            ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                          CCCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGGGTGACTTGAAGTGTTGCATGGGC 428
                                                                                                                                      GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG 248
                                                                                                                                                                                                                                                                                                   249 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCGAAAC 308
                                                                                                                                                                                                                                                                                                                          ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                         1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro 20
                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                            80
                                                                                                                                                                                                                          AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                         LysargCysCysProAspThrCysG1y1leLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                          MetCysGlyLysSerCysValSerProValLysAla 132
                      Matches:
Conservative:
Mismatches:
Indels:
Gaps:
             Length:
                                                                                                JS-10-613-105-2 (1-132) x ADL62375 (1-1084)
          4.25e-58
762.00
100.00%
100.00%
                                                 Similarity:
                                    Percent Similarity:
Alignment Scores:
                                                                                                                                                                                                   129
                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                          21
                                                                                                                                                                                                                           41
                                                                                                                                                                                                                                                    189
                                                                                                                                                                                                                                                                                                                             81
                                                                                                                                                                                                                                                                                                                                                      309
                                                                                                                                                                                                                                                                                                                                                                             101
                                                                                                                                                                                                                                                                                                                                                                                                      369
                                                                                                                                                                                                                                                                                                                                                                                                                                                      429
                                                                                                                                                                                                                                                                            61
                                                             Query Match:
                                                 Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 28
                        Score:
                                                                                                                                                ద
                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ద
                                                                                                                         ð
                                                                                                                                                                          ò
                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                음
                                                                                                                                                                                                                                                                                              요
                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                          ò
```

ADL57146 standard; DNA; 594

ADL57146

(first entry)

03-JUN-2004

ADL57146;

SAXAX

```
The invention relates to a novel isolated polypeptide (NOVX) comprising a mature form of any of the 37 amino acid sequences fully defined in the construction of any of the 37 amino acid sequences fully defined in the construction of the invention has antidabletic, anotation, hypoteptide, protozoacide, nootropic, controctective, antibacterial, fungicide, protozoacide, nootropic, controctective, antibactarians, anticonvulsant, osteopathic, antibactarial parkinsonian, anticonvulsant, osteopathic, antistrathritic, antiinflammatory, dermatological, antisthmatic, and antibodies controllipaemic activity. A polynuclectide of the invention may have a use antistrathritic, antitinflammatory, dermatological, antisthmatic, and antibodies controllipaemic acid molecules, preferably a NOVA-associated disorder. The nucleic acid molecules, polypeptides and antibodies are useful for treating, preventing or diagnosing diseases such as metabolic disorders, ciabetes, obesity, infectious diseases (viral, bacterial, fungal, helminthic, and protozoal), anorexia, cancer, cardiovascular diseases (Nypertension, atherosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociarosociaros
                                                                                                 antiatreriosclerotic; anorectic; virucide; antibacterial; fungicide; protozoacide; nootropic; neuroprotective; antibacterial; fungicide; protozoacide; nootropic; neuroprotective; antibarkinsonian; dermatcological; antiasthmatic; antibaemat; gene therapy; fibroblast growth factor receptor 4; FGFR4; complement factor I precursor; metalloproteinase-15 precursor; MDC3; T-lymphocyte surface antigen Ly-9 precursor; fibroblast growth factor-21; FGF-21; alpha-2 macroglobulin-like polypeptide variant; antibackoptoteinase 1 precursor; LIV-1; nuclear hormone receptor NOR-1; transmembrane protein-like; beta-neoendorphin-dynorphin precursor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,
                                                                         ds; gene; human; antidiabetic; anorectic; cardiant; hypotensive;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Padigaru M, Rieger DK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ort T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 17; SEQ ID NO 91; 214pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Guo X, Anderson DW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2002US-0409544P.
2002US-0410320P.
2002US-0411060P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-SEP-2002; 2002US-0412766P
23-SEP-2002; 2002US-041282EP
24-SEP-2002; 2002US-041283EP
36-SEP-2002; 2002US-0413342P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-SEP-2003; 2003WO-US028141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      asthma, or infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-315567/29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  P-PSDB; ADL57147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2004022723-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10-SEP-2002; 212-SEP-2002; 216-SEP-2002; 216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Zhong M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Key
```

```
substances for use in therapeutic or diagnostic methods. The nucleic acids are further used as hybridisation probes, in chromosome mapping, tissue typing, preventive medicine, and pharmacogenomics. The NoVX polypetides of the invention show homology to certain known human proteins: NOV1a-1t show homology to fibroblast growth factor receptor 4 (FGFR4); NOV2a shows homology to complement factor i precursor; NOV3a shows homology to complement factor in precursor; NOV3a shows homology to matrix metalloproteinase-15 precursor; NOV4a shows homology to fibroblast growth factor-21 (FGF-21); NOV1a-7c show homology to alpha-2 marcoglobulin-like polypeptide variant; NOV8a-8g show homology to alpha-2 marcoglobulin-like precursor; NOV8a-9g show homology to alpha-2 marcoglobulin-like converser; NOV9a-9; show homology to LIV-1 protein; NOV1a shows homology to LIV-1 protein; NOV1a shows homology to LIV-1 protein; NOV1a shows homology to conclear hormone receptor NOR-1; NOV1a-11; show homology to beta-necendorphin transmembrane protein-like; NOV1a-12 show homology to beta-necendorphin contraction precursor. The present sequence encodes a NOVX polypeptide of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              79 redecreredaadecreredaaagreerreaaageregagreerecreeraaaaarer 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCCAAAC 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTCGATGCTTAAC 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      therapy, in generation of antibodies that bind immunospecifically to NOVX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 139 GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TrpAlavalGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        41 AlaginCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LysArgCysCysProAspThrCysGly1leLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Argaagrecagesecretreceerrecresses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ds; gene; human; antidiabetic; anorectic; cardiant; hypotensive; antiarteriosclerotic; anorectic; virucide; antibacterial; fungicide; protozoacide; nootropic; neuroprotective; antiparkinsonian; anticonvulsant; osteopathic; antiarthritic; antiinflammatory; dermatological; antiasthmatic; antilipaemic; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                 Sequence 594 BP; 132 A; 157 C; 155 G; 150 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                              594
0 131
0 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Arcrededaharccrederrrecerrerdahacer 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-613-105-2 (1-132) x ADL57146 (1-594)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human NOV8c gene SEQ ID NO:89.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADL57144 standard; DNA; 594
                                                                                                                                                                                                                                                                                                                                                                                                                                              7.07e-58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  756.00
99.24%
99.24%
99.24%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similari
                                                                                                                                                                                                                                                                                                                                       the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             03-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADL57144;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ..
02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 29
ADL57144
ID ADL57144
XX
AC ADL57
XX
XX
DT 03-JU
XX
XX
KW d8; g
KW antia
KW proto
KW antia
KW derma
요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ሯ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
```

```
The invention relates to a novel isolated polypeptide (NOVX) comprising a mature form of any of the 37 amino acid sequences fully defined in the specification. A polypeptide of the invention has antidiabetic, anorectic, cardiant, hypotensive, antiateriosclerotic, anorectic, cardiant, hypotensive, antiateriosclerotic, anorectic, cardiant, hypotensive, antiateriosclerotic, anorectic, cardiant, hypotensive, antiateriosclerotic, anorectic, cardiant, hypotensive, antiaterial, fundicide, protozoacide, nootropic, antiatrhritic, antinflammatory, dermatological, antiasthmatic, and antiaterial antiatrhritic, antinflammatory, dermatological, antiasthmatic, and antibodies care useful in the manufacture of a medicament for treating a syndrome associated with a human disease, preferably a NOVX-associated disorder.

The nucleic acid molecules, polypeptides and antibodies are useful for treating, preventing or diagnosing diseases such as metabolic disorders, diabetes, obesity, infectious diseases with as metabolic disorders, helminthic, and protozoal), anorexia, cancer, cardiovascular diseases (hypertension, atheroscalerosis), neurodegenerative disorders, Alzheimer's disease, Parkinson's disease, epilepsy, immune disorders, Alzheimer's concentrations, and various dyslipidaemias. The nucleic acids and polypeptides may and various dyslipidaemias. The nucleic acids and polypeptides concentration, haematopoietic disorders, inflammatory skin disorders, asthma, and various dyslipidaemias. The nucleic acids and polypeptides concentration of antibodies that bind immunospecifically to NoVX substances for use in therapeutic or dispusostic methods. The NOVX substances for use in therapeutic or adiagnostic methods. The NOVX substances for use in therapeutic, and pharmacogenomics. The NOVX cubstances for use in therapeutic, and pharmacogenomics. The NOVX cubstances for use in therapeutic, and pharmacogenomics. NoVIa-1t show homology to certain known human probes, in chromosome mapping, proteins: NOVIa-1t show homology to certain known huma
fibroblast growth factor receptor 4; FGFR4; complement factor I precursor; matrix metalloproteinase-15 precursor; MDC3; T-lymphocyte surface antigen Ly-9 precursor; fibroblast growth factor-21; FGF-21; alpha-2 macroglobulin-11ke polypeptide variant; antileukoproteinase 1 precursor; LIV-1; nuclear hormone receptor NOR-1; transmembrane protein-11ke; beta-neoendorphin-dynorphin precursor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rieger DK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Padigaru M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ort T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 17; SEQ ID NO 89; 214pp; English
                                                                                                                                                                                                                 Location/Qualifiers
19. .417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Guo X, Anderson DW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2002US-0412825P.
2002US-0412767P.
2002US-0413342P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2002US-0411060P.
2002US-0412766P.
                                                                                                                                                                                                                                                                                                                                                                                                                                         2002US-0409145P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2002US-0410320P.
                                                                                                                                                                                                                                                                                                                                                                                              09-SEP-2003; 2003WO-US028141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-SEP-2002; 2002US-0414832P
                                                                                                                                                                                                                                                                  æ
                                                                                                                                                                                                                                                                  /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              asthma, or infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-315567/29.
P-PSDB; ADL57145.
                                                                                                                                                                                                                                                                                                         WO2004022723-A2
                                                                                                                                                                               Ното варієпв.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-SEP-2002;
16-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-SEP-2002;
24-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             10-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                         09-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                   18-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Zhong M,
```

```
shows homology to matrix metalloproteinase-15 precursor; NOV4a shows homology to MDC3; NOV5a-5c show homology to T-lymphocyte surface antigen L-9 precursor; NOV5a-6m show homology to fibroblast growth factor-21 (FGF-21); NOV7a-7c show homology to alpha-2 macroglobulin-like polypeptide variant; NOV8a-8g show homology to antileukoproteinase 1 precursor; NOV9a-9; show homology to LIV-1 protein; NOV10a shows homology to nuclear hormone receptor NOR-1; NOV11a show homology to beta-necendorphin transmembrane protein-like; NOV12a-12c show homology to beta-necendorphin dynorphin precursor. The present sequence encodes a NOVX polypeptide of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    resecteresaacerciesaaasrecricaaasercresasrecrerererererasaaarer 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ds; gene; human; antidiabetic; anorectic; cardiant; hypotensive; antiatteriosclerotic; anorectic; virucide; antibacterial; fungicide; protozoacide; nootropic; neuroprotective; antiparkinsonian; anticonvulsant; osteopath;; antiatrhritic; antiinflammatory; dermatological; antiasthmatic; antilipaemic; gene therapy; fibroblast growth factor receptor 4; RGFR4; complement factor I precursor; matrix metalloproteinase-15 precursor; MDC3; T-lymphocyte surface antigen Ly-9 precursor; fibroblast growth factor-21; RGF-21; alpha-2 macroglobulin-like polypetide variant; antiachelyproteinase I precursor; LIV-1; nuclear hormone receptor NOR-1; transmembrane protein-like; beta-neoendorphin-dynorphin precursor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                    MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                    Sequence 594 BP; 132 A; 157 C; 155 G; 150 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                            594
131
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Argrerecanarcerecerrrecererenander 414
                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                        Indels:
                                                                                                                                                                                                                                                                                                                                                                          Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                US-10-613-105-2 (1-132) x ADL57144 (1-594)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADL57140 standard; DNA; 594 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human NOV8a gene SEQ ID NO:85.
                                                                                                                                                                                                                                                                          8.67e-58
755.00
99.24%
99.24%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                    Best Local Similarity:
                                                                                                                                                                              invention.
                                                                                                                                                                                                                                                                                                                Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  03-JUN-2004
                                                                                                                                                                                                                                                          gnment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADL57140;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                        Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        요
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
```

```
The invention relates to a novel isolated polypeptide (NOVX) comprising a mature form of any of the 37 amino acid sequences fully defined in the specification. A polypeptide of the invention has antidiabetic, anorectic, cardiant, hypotensive, antiarterioscleroric, anorectic, cardiant, hypotensive, antiarterioscleroric, anorectic, cardiant, hypotensive, antiarterioscleroric, anorectic, cardiant, hypotensive, antiarterioscleroric, anorectic, cardiant, hypotensive, anticonvulsant, osteopathic, antipartinsonian, anticonvulsant, osteopathic, and propertides, muclaic acid molecules and antibodies are useful in the manufacture of a medicament for treating a syndrome associated with a human disease, preferably a NOVX-associated disorder. The nucleic acid molecules in propertides and antibodies are useful for treating, preventing or disgnosing diseases such as metabolic disorders. Creating, preventing or disgnosing diseases such as metabolic disorders, dispetension, atherosclerosis), neurodegenerative disorders, Alzheimer's disease, parkinson's disease, epilepsy, immune disorders and various dyalipidaemias. The nucleic acids and ovarious dyalipidaemias. The nucleic acids and polypeptides may also be used as targets for the identification of small molecules that modulate or inhibit e.g. neurodegenesis, call differentiation, haematopoietic disorders, inflammatory skin disorders, proliferation, haematopoietic disorders, inflammatory in generation of antibodies that bind immunospecifically to NoVX captase for use in therapeutic or diagnostic methods. The nucleic acids are further used as hybridisation probes, in dromosome mapping, tissue typing, preventive medicine, and pharmacogenemics for use in therapeutic or diagnostic methods. The NoVX is substances for use in therapeutic or diagnostic methods to methods of the invention show homology to Certain knowled the invention show homology to certain knowled in the norely of precursor; NOV4s a shows homology to matrix metallophopeus antigen typingerides of the invention ender a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ly-9 precursor; NOV6a-6m show homology to fibroblast growth factor-21 (FGF-21); NOV7a-7c show homology to alpha-2 macroglobulin-like polypeptide variant; NOV8a-8g show homology to antileukoproteinase 1 precursor; NOV9a-9; show homology to LIV-1 protein; NOV10a shows homology to nuclear hormone receptor NOR-1; NOV11a-11j show homology to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rieger DK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Padigaru M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ort T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 17; SEQ ID NO 85; 214pp; English.
                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Guo X, Anderson DW,
                                                                                                                                                                                                                                                                                     2002US-0409544P.
2002US-0410320P.
2002US-0411060P.
                                                                                                                                                                                                                                                                                                                                                  2002US-0412766P.
2002US-0412825P.
2002US-0412767P.
                                                                                                                                                                                                                                                                                                                                                                                                             25-SEP-2002; 2002US-0413342P.
                                                                                                                                                                                                                         09-SEP-2003; 2003WO-US028141
                                                                                                   æ
                                                                                               /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            asthma, or infections
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-315567/29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    P-PSDB; ADL57141
                                                                                                                                          WO2004022723-A2
                                                                                                                                                                                                                                                                                     10-SEP-2002;
12-SEP-2002;
16-SEP-2002;
                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                    23-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                      23-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                             24-SEP-2002;
                                                                                                                                                                                                                                                                    09-SEP-2002;
                                                                                                                                                                                 18-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zhong M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (CURA-)
                                                          Key
```

WO2004022723-A2

18-MAR-2004

```
Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                          transmembrane protein-like; NOV12a-12c show homology to beta-necendorphin dynorphin precursor. The present sequence encodes a NOVX polypeptide of the invention.
                                                                                                                                                                                                                                                                                                TGGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCTAAGAAATCT 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysKetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 258
                                                                                                                                                                                                                                                                                                                                                             GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG 198
                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                               40
                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                        80
                                                                                                                                                                                                                                                     78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antiatreriosclerotic; anorectic; virucide; antibacterial; fungicide; protozoacide; nocropic; neuroprotective; antiparkinsonian; missibacterial; fungicide; anticonvulgant; osteopathic; antiathritic; antinflammatory; dermatcological; antiasthmatic; antilpaemic; gene therapy; fibroblast growth factor receptor 4; FGFR4; complement factor I precursor; matrix metalloproteinase-15 precursor; MDC3; T-lymphocyte surface antigen Ly-9 precursor; fibroblast growth factor-21; FGF-21; alpha-2 macroglobulin-like polypetide variant; antichenkoproteinase 1 precursor; LIV-1; nuclear hormone receptor NOR-1; transmembrane protein-like; beta-necendorphin-dynorphin precursor.
                                                                                                                                                                                                                                                                                                                                    AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                        1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                              TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                        LysArgCysCysProAspThrCysGly1leLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                           ds; gene; human; antidiabetic; anorectic; cardiant; hypotensive;
                                                            Sequence 594 BP; 132 A; 157 C; 155 G; 150 T; 0 U; 0 Other;
                                                                                                     594
0 1131
0 0 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative:
Mismatches:
Indels:
                                                                                                     Length:
Matches:
                                                                                                                                                                      Gaps:
                                                                                                                                                                                                 US-10-613-105-2 (1-132) x ADL57140 (1-594)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human NOV8b gene SEQ ID NO:87.
                                                                                          1.06e-57
754.00
99.24%
99.24%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADLS7142 standard; DNA; 594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19. .417
/*tag= €
                                                                                                                                           Best Local Similarity:
Query Match:
                                                                                                                                Percent Similarity:
                                                                                       Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         03-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADL57142;
                                                                                                                                                                                                                                                                                                         79
                                                                                                                                                                                                                                                                                                                                     41
                                                                                                                                                                                                                                                                                                                                                              139
                                                                                                                                                                                                                                                                                                                                                                                                                 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                               21
                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                             81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     쉽
                                                                                                                                                                                                                                                   요
                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
        SXSSS
                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
```

```
The invention relates to a novel isolated polypeptide (NOVX) comprising a mature form of any of the 37 amino acid sequences fully defined in the specification. A polypeptide of the invention has antidiabetic, cardiant, hypotensive, antiarteriosclerotic, anorectic, cardiant, hypotensive, antiarteriosclerotic, anorectic, antibacterial, fungicide, protozoacide, noctropic, neuroprotective, antiparkinsonian, anticonvulsant, osteopathic, antiarteritic, antimifarmantory, dermatological, antiasthmatic, and antibacterial, fungicide, protozoacide, noctropic, antiarteritic, antimifarmantory, dermatological, antiasthmatic, and antibodies are useful in the manufacture of a medicament for treating a syndrome consociated with a human disease, preferably a NOVX-associated disorder. Treating, preventing or diagnosing diseases such as metabolic disorders, diabetes, obesity, infectious diseases uch as metabolic disorders, catabuthic, and protozoal), anorexia, cancer, cardiovascular diseases (helminthic, and protozoal), anorexia, cancer, cardiovascular diseases (helminthic, and protozoal), anorexia, cancer, cardiovascular diseases (helminthic, and subsence) and subsence of diseases (pilepsy) immune disorders, asthma, and various dyslipidaemias. The nucleic acids and polypeptides of that modulate or inhibit e.g. neurogenesis, inflammatory shin disorders, that modulate or inhibit e.g. neurogenesis, cell differentiation, and penartion of antibodies that bind immunospecifically to NoVX substances for use in therapeutic or diagnostic methods. The nucleic acids are further used as hybridisation probes, in chromosome mapping, tissue typing, preventive medaline, and pharmacogenomics. The NoVX substances for use in therapeutic or diagnostic methods. The NoVX substances homology to cortain known human proteins: NOV1a-1t show homology to certain known human proteins: NOV2a-brows homology to complement factor I precursor; NOV3a shows homology to complement factor I precursor; homology to complement factor I precursor; homology to proteins hom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,
                                                                                                                                                                                                                                                                                                                                                                      Padigaru M, Rieger DK;
                                                                                                                                                                                                                                                                                                                                                                      Ort T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 17; SEQ ID NO 87; 214pp; English.
                                                                                                                                  10-SEP-2002; 2002US-0405544P.
12-SEP-2002; 2002US-0410320P.
16-SEP-2002; 2002US-041030P.
23-SEP-2002; 2002US-04127666P.
23-SEP-2002; 2002US-0412825P.
24-SEP-2002; 2002US-0412825P.
25-SEP-2002; 2002US-041342P.
                                                                                                                                                                                                                                                                                                                                                                      Guo X, Anderson DW,
                                                                                                                                                                                                                                                                 25-SEP-2002; 2002US-0413342P.
30-SEP-2002; 2002US-0414832P.
                                                                               09-SEP-2003; 2003WO-US028141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         asthma, or infections.
                                                                                                                                                                                                                                                                                                                             (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-315567/29.
P-PSDB; ADL57143.
                                                                                                                                                                                                                                                                                                                                                                      Zhong M,
```

Seguence 594 BP; 132 A; 157 C; 155 G; 150 T; 0 U; 0 Other;

```
GCCCAGTGCCTTAGATACAAGAAACCTGAGCGCCAGAGTGTGACTGGCAGTGTCCAGGGAAG 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cccccaartrcrgrgagarggarggccagrgcaagcgrgacrrgaagrgrrgcarggcc 378
                                                                                                                                                                                                                                                                20
                                                                                                                                                                                                                                                                                           40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ds, gene; human; antidiabetic; anorectic; cardiant; hypotensive; antiatteriosclerotic; anorectic; virucide; antibacterial; fungicide; protozoacide; nootropic; neuroprotective; antiparkinsonian; anticorvulsant; osteopathic; antiatthritic; antiinflammatory; dermatological; antiasthmatic; antilipaemic; gene therapy; fibroblast growth factor receptor 4; RGFR4; complement factor I precursor; mort; metalloproteinase-15 precursor; MDC3; T-lymphocyte surface antigen Ly-9 precursor; fibroblast growth factor-21; RGF-21; alpha-2 macroglobulin-like polypetide variant; antiletkoproteinase 1 precursor; LIV-1; nuclear hormone receptor NOR-1; transmembrane protein-like; beta-neoendorphin-dynorphin precursor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             41 AlaglnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                            TrpAlaValGluGlySerGlyLyBSerPheLyBAlaGlyValCyBroProLyBLyBSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGAGATGTTGTCCCGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCCAAAAC
                                                                                                                                                                                                                                                             MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
     594
0 1131
0 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGTGTGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 414
     Length:
Matches:
Conservative:
Mismatches:
                                                                                                                       Indels:
                                                                                                                                                  Gaps:
                                                                                                                                                                                                       US-10-613-105-2 (1-132) x ADL57142 (1-594)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADL57148 standard; DNA; 594 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human NOV8e gene SEQ ID NO:93.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-SEP-2003; 2003WO-US028141.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09-SEP-2002; 2002US-0409145P.
2.4e-57
750.00
99.24%
99.24%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                              Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO2004022723-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        03-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-MAR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     379
                                                                                                                                                                                                                                                                                                                                                                               21
                                                                                                                                                                                                                                                                                                                                                                                                                                       79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADL57148;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                    Query Match:
DB:
           ..
No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 32
ADL57148
ADL57148
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
ANC ADL5
AN
                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                 원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ٠<u>۵</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
```

```
The invention relates to a novel isolated polypeptide (NOVX) comprising a mature form of any of the 37 amino acid sequences fully defined in the antenetion. A polypeptide of the invention has antidiabetic, ancectic, cardiant, hypotensive, antiarteriosclerotic, ancectic, rivulabacerial, fundicide, protozoacide, mootropic, antidiabacerial, fundicide, protozoacide, mootropic, antidiabamatory, dermatological, antiasthmatic, and antibacerial and antidakinant contropic, antidatinamatory, dermatological, antiasthmatic, and antibacerial and antidamatory, dermatological, antiasthmatic, and antibacerial cardiamatory, repeptides mucleic acid molecules and antibodies are useful in the manufacture of a medicament for treating a syndrome associated with a human disease, preferably a NOVX-associated disorder. The mucleic acid molecules, polypeptides and antibodies are useful for treating, preventing or disglocating diseases such as metabolic disorders, disperts, inferctious diseases where it is an expectation, atheroaclerosis) neurodegenerative disorders, and protozoal), anocexis, inflammatory skin diseases (typertension, atheroaclerosis) neurodegenerative disorders, and protozoal), anocexis, inflammatory skin diseases (typertension, atheroaclerosis) neurodegenerative disorders, and protozoal), anocexis, inflammatory skin disease, conting and angiogenesis, and protozoal, and pharacogenesis, in the modulate or inhibit e.g. neurogenesis, cald and angiogenesis, in generation, haematopolisal, wound healing and angiogenesis, in the modulate or inhibit e.g. neurogenesis, et all differation, haematopolisal, wound healing and angiogenesis, in the content and proteins NOVIa-1t show homology to fibroblast growth factor receptor of eiges are typing, perventive medicine, and pharacogenemics. The NOVA shows homology to matrix metalloproceinases, in chromosome mapping prevented as hybrid, sender homology to antine homology to alpha-2 macropolulisations of the invention of antine how homology to fibroblast growth factor receptor (FGF2-21); 
                                                                                                                                                                                                                                                                                                                         New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease, asthma, or infections.
                                                                                                                                                                                                                          Rieger DK;
                                                                                                                                                                                                                            Padigaru M,
                                                                                                                                                                                                                          Ţ,
                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 17; SEQ ID NO 93; 214pp; English.
                                                                                                                                                                                                                          ort
, 2002US-0409544P.
; 2002US-0410320P.
; 2002US-0411060P.
; 2002US-0412766P.
; 2002US-0412825P.
; 2002US-041342P.
; 2002US-041342P.
                                                                                                                                                                                                                            Guo X, Anderson DW,
                                                                                                                                                                                    (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                  WPI; 2004-315567/29.
                                                                                                                                                                                                                                                                                     P-PSDB; ADL57149
                     12-SEP-2002;
16-SEP-2002;
23-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    the invention
                                                                                 23-SEP-2002;
24-SEP-2002;
                                                                                                                            25-SEP-2002;
                                                                                                                                            30-SEP-2002;
                                                                                                                                                                                                                          Zhong M,
```

Sequence 594 BP; 132 A; 157 C; 155 G; 150 T; 0 U; 0 Other;

594 0 131 0

Matches: Conservative: Mismatches: Indels:

2.4e-57 750.00 99.24% 99.24% 98.43%

Percent Similarity: Best Local Similarity: Query Match: DB:

Length:

43

23 62

567 128 1 0 0

182

63

242

83

302

123

103

362

21 79 41 139

요

19

셤 ò 199

8 8

81 259 101

Š ద

61

g

ò

319

임

ઠે

379

요

ADK11941

RESULT 33

121

ò

```
ds; gene; human; antidiabetic; anorectic; cardiant; hypotensive; antiarteriosclerotic; anorectic; virucide; antibacterial; fungicide; protosocide; nootropic; neuroprotective; antiparkinsonian; anticonvulsant; osteopathic; antiarthritic; antininflammatory; dermatological; antiasthmatic; antilipaemic; gene therapy; fibroblast growth factor receptor 4; FGR4; complement factor I precursor; antilipaemic; gene therapy; fibroblast growth factor antigen Ly-9 precursor; fibroblast growth factor-21; FGF-21; fibroblast growth factor-21; FGF-21; antileukoproteinase 1 precursor; hull-1; nuclear hormone receptor NOR-1; transmembrane protein-like; beta-neoendorphin-dynorphin precursor.
                                                                                                                                                                                                          SerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaProTrpAlaVal
                                                                                                                                                                                                                                                                                                            GAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCTGCCCAGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               303 TTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGCATGTGTGGG
                                                                                                                                                                                                                                                                                      GluGlySerGlyLysSerPheLysAlaGlyValCysProProLysEysSerAlaGlnCys
                                                                                                                                                                                                                                                                                                                                                              LeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLysLysArgCys
                                                                                                                                                                                                                                                                                                                                                                                            CTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAGAAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                            CysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsnProThrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 rerecreacacristicacarcaaareceregarecrestreacaceceaaacecaacaae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ArglysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsnProProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGlyMetCysGly
                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LysSerCysValSerProValLysAla 132
                                                                                                                                                                        (1-567)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ВР
                                                                                                                                                                          x ADK11941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human NOV8f gene SEQ ID NO:95.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-SEP-2003; 2003WO-US028141.
                                  6.29e-57
745.00
100.00%
99.22%
97.77%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADL57150 standard; DNA; 594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first
                                                                                                                                                                        US-10-613-105-2 (1-132)
                                                                          Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO2004022723-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           03-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-MAR-2004
                                                                                                                                                                                                                                                                                          24
                                                                                                                                                                                                                                                                                                                              63
                                                                                                                                                                                                                                                                                                                                                                    44
                                                                                                                                                                                                                                                                                                                                                                                                        123
                                                                                                                                                                                                                                                                                                                                                                                                                                              64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADL57150
                                                                                                                Query Match:
DB:
                                        Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score:
                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                    요
                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                TrpalavalGluGlySerGlyLygSerPheLygAlaGlyValCygProProLygLygSer 40
                                                                                                                                                                                          The invention relates to a method of inhibiting a cancerous phenotype of a cell comprises contacting a cancerous mammalian cell with an agent for inhibition of DKRZp5661133 activity. The methods are useful for treating cancer, e.g. breast cancer. This sequence represents a gene product which is differentially expressed in breast cancer cells. The sequence can be used in the method of the invention.
                                                                                                                                                                                                                                                                                                                                                                          CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGATTAAAC 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 378
                                                                                                                                                                                                                                                                                                            AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 258
                                                                                                                                                                                                                                                                                                                                                  ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                              ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                        80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Inhibiting a cancerous phenotype of a cell, useful for treating breast cancer comprises contacting a cancerous mammalian cell with an agent for inhibition of DKFZp5661133 activity.
                                        20
                                                                          78
                                                                                                                                                                                                                                                                        LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn
                                      MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                            Argaagrecagegeererrecetrecregargergerrecergegaacrergecacer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gene therapy; DKFZp5661133 activity inhibitor; differential expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 567 BP; 127 A; 146 C; 150 G; 144 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Breast cancer differentially expressed gene product #347.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGTGTGGGAAATCCCGCGTTTCCCCTGTGAAAGCT 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 30; SEQ ID NO 347; 257pp; English.
US-10-613-105-2 (1-132) x ADL57148 (1-594)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            08-JAN-2002; 2002US-0345637P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08-JAN-2003; 2003WO-US000657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         standard; DNA; 567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (CHIR ) CHIRON CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-577534/54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2003057926-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   breast cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ното варіепв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADK11941;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hansen R;
```

Rieger DK;

```
Observationary, nagamatopoletic disorders, intrammatory skin ausorders, asthma, and various dyslipidaemias. The nucleic acids and polypeptides may also be used as targets for the identification of small molecules that madulate or inhibit e.g. neurogenesis, cell differentiation, cell proliferation, haematopoiesis, wound healing and angiogenesis, in gene therapy, in generation of antibodies that bind immunospecifically to Novx substances for use in therapeutic or diagnostic methods. The nucleic caids are further used as hybridisation probes, in chromosome mapping, tissue typing, preventive medicine, and pharmacogenomics. The Novx polypeptides of the invention show homology to certain known human proteins. Novia-1t show homology to fibroblast growth factor receptor (FGFR4); NOV2a shows homology to complement factor I precursor; NOV3a shows homology to fibroblast growth factor-21 (FGFR4); NOV2a show homology to fibroblast growth factor-21 (FGF-21); NOV3a-7c show homology to fibroblast growth factor-21 (FGF-21); NOV3a-7c show homology to fibroblast growth factor-21 (FGF-21); NOV3a-91 show homology to fibroblast growth factor-21 (FGF-21); NOV3a-91 show homology to fibroblast growth factor-21 (FGF-21); NOV3a-91 show homology to fibroblast growth factor-21 (FGF-21); NOV3a-91 show homology to fibroblast growth factor-21 cransmembrane protein-like; NOV3-12-12c show homology to beta-neoendorphin cransmembrane protein-like; NOV3-12-12c show homology to beta-neoendorphin dynorphin precursor. The present sequence encodes a NOVX polypeptide of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to a novel isolated polypeptide (NOVX) comprising a mature form of any of the 37 amino acid sequences fully defined in the specification. A polypeptide of the invention has antidiabetic, anorectic, cardiant, hypotensive, antiatreriosclerotic, anorectic, curdiant, hypotensive, antiatreriosclerotic, anorectic, cardiant, hypotensive, anticonvulsant, osteopathic, neuroprotective, antipparkinsonian, anticonvulsant, osteopathic, antiatrhritic, antipirlammatory, dermatological, antiashmatic, and antibodies are useful in the manufacture of a medicament for treating a syndrome associated with a human disease, preferably a NOVX-associated disorder. The nucleic acid molecules, polypeptides and antibodies are useful for treating, preventing or diagnosing diseases such as metabolic disorders, diabetes, obesity, infectious diseases (viral, bacterial, fungal, halmithic, and protozoal), anorexia, cancer, cardiovascular diseases (helmithic, and protozoal), anorexia, cancer, cardiovascular diseases (helmithic, and protozoal), neurodegenerative disorders, disease, parkinson's disease, epilepsy, immune disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,
                                                                                                                                                                                                                                                                                                                                            Padigaru M,
                                                                                                                                                                                                                                                                                                                                            H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 17; SEQ ID NO 95; 214pp; English.
                                                                                                                                                                                                                                                                                                                                            Ort
                   09-SEP-2002; 2002US-0409145P.
10-SEP-2002; 2002US-0409544P.
12-SEP-2002; 2002US-0410320P.
16-SEP-2002; 2002US-0411060P.
23-SEP-2002; 2002US-0412766P.
23-SEP-2002; 2002US-0412825P.
24-SEP-2002; 2002US-0412767P.
25-SEP-2002; 2002US-0413742P.
30-SEP-2002; 2002US-0413742P.
                                                                                                                                                                                                                                                                                                                                       Zhong M, Guo X, Anderson DW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          asthma, or infections
                                                                                                                                                                                                                                                                                        (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                2004-315567/29.
                                                                                                                                                                                                                                                                                                                                                                                                                            P-PSDB; ADL57151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        the invention
```

```
Seguence 594 BP; 132 A; 156 C; 155 G; 146 T; 0 U; 5 Other;
                              594
127
0
5
                                          Matches:
Conservative:
Mismatches:
Indels:
                                Length:
                              5.86e-55
723.00
96.21%
96.21%
94.88%
                                                   Percent Similarity:
Best Local Similarity:
Query Match:
```

```
ProThrArghrgLy8ProGlyLy8Cy8ProValThrTyrGlyGlnCy8LeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             79 TGGGCTGTGGAAGGCTCTGGAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCT 138
                                                                                                                                                                                                                                                                                                                   139 GCCCAGTGCCTTAGATACAAGAACCTGAGYGCCAGAGTGACTGCCAGTGTCCAGGGAAG 198
                                                                                                                                                                                                                                                                                                                                                                                                                          199 AAGAGATGTTGTCCTGACATTGTGCCTAAATGCCTGGATCCTGTTGACACCCCAAAC 258
                                                                                                                                                           40
                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                        80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; forensic analysis; chromosome marker; organelle-specific marker; novel-related disorder; neurological disorder; gene therapy; nootropic; neuroprotective; secretory leukocyte proteinase inhibitor; inhibitor; variant; Sepin; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                        LyBArgCygCygCygProAspThrCygGlyIleLygCygLeuAspProValAspThrProAsn
                                                 1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                   Angalagiccaececercrycecerrecresses en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contrace en a contr
                                                                                                                                                           TrpalaValGluGlySerGlyLyBSGerPheLyBAlaGlyValCyBFroProLyBLyBSer
                                                                                                                                                                                                                                                                 41 AlaGinCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human secretory leukocyte proteinase inhibitor variant (Sepin) cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Human mature Sepin protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121 MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Arcretegealarceyecerricecererelal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Human Sepin protein"
US-10-613-105-2 (1-132) x ADL57150 (1-594)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAL60894 standard; cDNA; 605 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-NOV-2002; 2002WO-EP013210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /*tag= f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /product= '
22. .96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /*tag= b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            product=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97. 360
/*tag= d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             364. .605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           l. .21
/*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2003046180-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               polyA_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   03-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    polyA_site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic
                                                                                                                                                           21
                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAL60894;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Key
5'UTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3'UTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                           ò
                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                              요
                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
```

```
Sequence 528
                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
                                           06-MAY-2004
                                                                                                                                                                                                         21-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          73
               ADK61172;
                                                                                                                                                                                                                                                                                               ( HSSN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match:
                                                                                                                                                                                                                                                                                                              SLOK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ..
00
..
용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                              The invention relates to human novel polynucleotide and polypeptide sequences useful as reagents in forensic analyses, as chromosome markers, as tissue/cell/organelle-specific markers, in producing expression vectors, or in screening and diagnostic assays. The invention is used as reagents in screening and diagnostic assays for abnormal novel expression and/or biological activity, and in screening compounds that may be used in the treatment of novel-related disorders, e.g. neurological disorders. The novel gene is also used in gene therapy. The present sequence is human secretory leukocyte proteinase inhibitor variant (Sepin) cDNA, a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGAGATGTTGTTCCTGACACTTGTGGCATCAAATGCCTGGATCTGTTGACACCCCCAAAC 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCAACAAGGAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCCAGGGAAG 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                resecricresakasecreresakastecricakaseresakareretereterakakarer 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        80
                                                                                                                                                                            New isolated polynucleotides and polypeptides useful as reagents in forenist analyses, as chromosome markers, as tissue/cell/organelle-specific markers, in producing expression vectors, or in screening and diagnostic assays.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TrpAlaValGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LyshrgCysCysProAspThrCysGly1leLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 605 BP; 147 A; 154 C; 152 G; 152 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGTGTGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps:
                                                                                                                                                                                                                                                  Claim 1; Page 223-224; 242pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (1-605)
                                                                                                                                                                                                                                                                                                                                                                                                                    novel sequence of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-613-105-2 (1-132) x AAL60894
            28-NOV-2001; 2001US-0334147P.
14-DEC-2001; 2001US-0340465P.
18-APR-2002; 2002US-0373947P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9.96e-55
720.50
97.73$
97.73$
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADK61172/c
ID ADK61172 standard; DNA; 528
                                                                                                                                  WPI; 2003-505202/47.
                                                                                                     Bejanin S, Tanaka
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
                                                                        GEST ) GENSET SA.
                                                                                                                                                P-PSDB; AAO30176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
DB:
```

g

ò

ò

8

∂

음

ò 셤 ઠે

ద

ò 셤 8

```
The invention relates to a method of classifying an ovarian tumor as a BRCA-1-like or BRCA-2-like or non-BRCA-like tumor by: (1) determining a pattern of expression in the ovarian tumor of seweral markers given in the specification; and (2) comparing a similarity of the pattern of expression of the markers in the ovarian tumor to a pattern of expression of the markers in the ovarian tumor to a pattern of expression of the markers in a comparison tissue of a known BRCA-1-like or BRCA-1-like or non-BRCA-like tumor. The method is useful for classifying an ovarian tumor as a BRCA-1-like or BRCA-2-like or non-BRCA-like tumor. This sequence corresponds to an ovarian cancer -related gene having an altered pattern of expression in ovarian cancer. (Note: The sequence data for this patent did not form part of the printed specification but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Liassirying an ovarian tumor as a BRCA-1-like or BRCA-2-like or non-BRCA-sermining a pattern of expression in the ovarian tumor of several markers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTTGCCCTGGGAACTCTGGCACCTTGGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCT 467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGAGTCTGTCCTGAGAAATCTGCCCAGTGCCTTAGATACAAGAACCTGAGTGCCAG 407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     92
                                                 Ovarian cancer-related DNA #327 with altered ovarian cancer expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeudapprovaldappthrProdanProThrArgArgLyBroGlyLyBcYgProValThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LeuAlaLeuGlyThrLeuAlaProTrpAlaValGluGlySerGlyLysSerPheLysAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlyvalCysProProLysLysSerAlaGlnCysLeuArgTyrLysLysProGluCysGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SerAspTrpGlnCysProGlyLysLysArgCysCysProAspThrCysGlyIleLysCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Acroacroccacrorccaccaacaacaacarorrorccroacacrrorccaaroccarcaaaroc
                                                                                                   ds, gene; ovarian tumor; BRCA-1-like; BRCA-2-like; non-BRCA-like;
gene expression; primer; cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        528
0000
0000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP; 130 A; 144 C; 130 G; 124 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; SEQ ID NO 342; 137pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ftp.wipo.int/pub/published_pct_sequences)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ) US DEPT HEALTH & HUMAN SERVICES.) SLOAN KETTERING INST CANCER RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   x ADK61172 (1-528)
                                                                                                                                                                                                                                                                                                                                                                                         13-FEB-2003; 2003WO-US004688.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Jazaeri AA, Boyd J, Liu ET;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     13-FEB-2002; 2002US-0357031P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2.99e-53
703.00
100.00%
100.00%
(first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2003-689589/65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-613-105-2 (1-132)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                      WO2003068054-A2
```

```
Query Match:
DB:
..
90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT
                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ሯ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes a DNA sequence (A) encoding an analogue of a mammalian serine protease inhibitor (B). The DNA sequences and recombinant methods allow manufacture of a class of inhibitors of e.g. cathepsin G, elastase, and trypsin, with different specificities. The recombinant serine protease product can be directed to act intracellularly or extracellularly and is useful in treating conditions caused by a disturbance in the native protease/protease inhibitor balance of such as emphysema, arthritis, gonerulonephritis, periodnitis, muscular dystrophy, tumour invasion, sepais, and acute leukemia. (A) allows (B) to be recombinantly produced in sufficient quantities and purities so as to provide economical pharmaceutical compositions. (B) is resistant to heat, cid, and a variety of proteolytic enzymes, is thermodynamically stable in extracellular conditions, and exhibits a high degree of self assembly trimily mhe process.
                                                                                                                                                       CTGGATCCTGTTGACACCCCAAACCCAACAAGAAGAAGCCTGGGAAGTGCCCAGTGACT 287
                                                                              New DNA sequence encoding mammalian serine protease inhibitor - useful for recombinantly producing inhibitors with different specificities and treating diseases such as emphysema, arthritis, muscular dystrophy, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 stimuli. The present sequence represents the DNA sequence of ompA-SLPI (Updated on 20-MAR-2003 to correct PR field.)
                                                  TyrGlyGlnCysLeuMetLeuAsnProProAsnPheCysGluMetAspGlyGlnCysLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Serine protease inhibitor; human; emphysema; arthritis; peridontitis; muscular dystrophy; tumour invasion; glomerulonephritis; sepsis; acute leukemia; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Thompson RC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 460 BP; 123 A; 114 C; 125 G; 98 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eisenberg SP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 3; Col 37-38; 37pp; English.
                                                                                                                                                                                                                                                                                                                           BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Stetler GL, Bandyopadhyay PK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         84US-00678822.
86US-00890526.
86US-00903471.
87US-00031846.
90US-00563832.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94US-00279056
                                                                                                                                                                                                                                                                                                                        AAX16271 standard; DNA; 460
                                                                                                                                                                                                                                                                                                                                                                                                                                (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA sequence of ompA-SLPI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1999-166640/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (AMGE-) AMGEN INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tumor invasion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-JUL-1986;
03-SEP-1986;
30-MAR-1987;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22-JUL-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                20-MAR-2003
19-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US5871956-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16-FEB-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-AUG-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-DEC-1984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                                                                                                                             AAX16271;
                                                     93
                                                                                                        286
                                                                                                                                                             113
                                                                                                                                                                                                                226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    stimuli
                                                                                                                                                                                                                                                                                               AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX16271
AAX
                                                                                                                                                                                                             셤
                                                                                                        용
                                                                                                                                                          8
                                                  ઠ
```

Alignment Scores:

```
409
                                                                                                                                                                                       169
                                                                                                                                                                                                                                                                                       289
                                                                                                                                                                                                                                                                                                               81 ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAan 100
                                                                                                                                                                                                                                                                                                                                       349
                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                            ||||||| ::: ::: ::: ||| ATGAAAAAGACGACTGCGAGTGGCAGTGCTTCGCTACCGTAGCG--- 118
                                                                                                                                                                                                                                       229
                                                                                                                                                              40
                                                                                                                                                                                                                                                               80
                                                                                                                                                                                                               9
                                                                                                                                                                           1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                               LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn
                                                                                                                                                               21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer
                                                                                                                                                                                                               41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                       AAACGTTGTTGCCCGGACACCTGCGGCATCAAATGCCTGGATCCGGTTGATACCCCGAAC
                                                                                                                                                                                                                                                                                                                                       cceactcerceaaaacceegraaarecceegraaccrareeccagrercrearecreaac
                                                                                                                                                                                                                                                                                                                                                                 ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysRetGly
                                                                                                                                                                                                                                                                                                                                                                                           350 CCGCCGAACTTCTGCGAAATGGACGGCCAGTGTAAACGAGATCTGAAATGCTGTATGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Serine protease inhibitor; cytostatic; anti-inflammatory; arthritis; protease mediated tissue destruction; emphysema; glomerulonephritis; periodontitis; muscular dystrophy; tumour invasion; chymotrypsin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ပ္ထ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OmpA secretory leukocyte protease inhibitor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Thompson
460
112
5
11
11
                                                                                                                                                                                                                                                                                                                                                                                                                 MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                         Archececcaarchreferricececeraaacca 445
Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Stetler GL,
                                                               Gape:
                                                                                      US-10-613-105-2 (1-132) x AAX16271 (1-460)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PK, Eisenberg SP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        84US-00678822.
85US-00803471.
86US-00890526.
87US-00031846.
87US-00082962.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  91US-00712354
 3.41e-48
645.00
88.64%
84.85%
84.65%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           standard; DNA; 460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BOULDER INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2000-678667/66
                       Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bandyopadhyay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (AMGE-) AMGEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  elastase; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     02-DEC-1985;
29-JUL-1986;
30-MAR-1987;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-JUN-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-DEC-1984;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US6132990-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             04-AUG-1987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        03-JAN-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic
                                                                                                                                                                                        119
                                                                                                                                                                                                                                        170
                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                        230
                                                                                                                                                                                                                                                                                                                                        290
                                                                                                                                                                                                                                                                                                                                                                 101
                                                                                                                                                                                                                                                                                                                                                                                                                                           410
                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAC97622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAC97622
```

```
This invention relates to new purified and isolated mammalian serine protease inhibitors proteins which comprise at least 8 cysteine residues and no more than 107 amino acids. The protease inhibitors are capable of inhibiting chymotrypsin and elastese. Sequences AAC97526 - AAC97534, AAC97544 - AAC97534 and AAC97544 - AAC97534.

AAC97574 - AAC97581 and AAC97644 - AAC97641 represent DNA encoding the protease inhibitors of the invention, and include oligonucleotide sequences used in the isolation and characterisation of the proteins. Primers AAC97535 - AAC97538 - AAC97538 - AAC97631 are used in the construction of DNA encoding the protease inhibitors. Peptide sequences ABS3122 represent the protease inhibitors of the invention and various other peptides used in the isolation of the protease inhibitors. The serine protease inhibitor protein is useful for treating a protease mediated condition, which includes protease mediated tissue destruction, eg. emphysema, arthritis, glomerulonephritis, periodontitis, muscular dystrophy or tumour invasion. It is also useful for modulating protease activity. The DNAs are useful for producing the proteins, especially by
mediated condition or tissue destruction e.g. emphysema or tumor invasion and for recombinant production of inhibitors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 460 BP; 123 A; 114 C; 125 G; 98 T; 0 U; 0 Other;
                                                                                                           Col 37-38; 47pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.41e-48
645.00
88.64%
84.85%
84.65%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           recombinant methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
```

```
229
                                                                                                                                                                                                                                                                                                       ProThrArgArgLy8ProGlyLy8Cy8ProValThrTyrGlyGlnCy8LeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                      CCGACTCGTCGAAAACCGGGTAAATGCCCGGTAAACCTATGGCCAGTGTCTCGATGCTGAAC 349
                                                                                                                                                                                                                                                                                                                                                                     CGGCGGAACTTCTGCGAAATGGACGGCCAGTGTAAACGAGATCTGAAATGCTGTATGGGT 409
                                                                                                                                                                         AAACGTTGTTGCCCGGACACCTGCGGCATCAAATGCCTGGATCCGGTTGATACCCCGAAC 289
                                                                                                                                                                                                                                                                                                                                                         ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                          40
                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                         80
                                                                                                          1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro 20
                                                                                                                         21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysSer
                                                                                                                                                                                                         AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                  GCGCAGTGTCTGCGGTACAAAAACCGGAATGCCAGTCCGACTGGCAGTGCCCGGGTAAA
                                                                                                                                                                                                                                                        LysArgCysCysProAspThrCysGly1]eLysCysLeuAspProValAspThrProAsn
 460
112
14
14
                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                    US-10-613-105-2 (1-132) x AAC97622 (1-460)
                                   Best Local Similarity:
                        Percent Similarity:
                                                                                                                                 62
                                                                                                                                                                                                          41
                                                                                                                                                                                                                                 170
                                                                                                                                                                                                                                                                                 230
                                                                                                                                                                                                                                                                                                                                                                                350
                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                  119
                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                                                                                290
                                                                                                                                                                                                                                                                                                                                                         101
                                                Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 39
                                                                                                                                셤
                                                                                                         ઠે
                                                                                                                                                          ઠે
                                                                                                                                                                             셤
                                                                                                                                                                                                     ò
                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                ે
                                                                                                                                                                                                                                                                                                                                                       ઠે
```

21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysSer -----CAGGCCTCTGGTAAAAGCTTCAAAGCTGGCGTATGCCCGCCGAAAAATCC 41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys 170 ececaerercrecegracaaaaaccegaareccaercceacreccaerecceareaa LysArgCysCysProAspThrCysG1y1leLysCysLeuAspProValAspThrProAsn 230 AAACGTTGTTGCCCGGACACCTGCGGCATCAAATGCCTGGATCCGGTTGATACCCCGAAC

119

a ò 셤 ठ 8 ò d ઠ ద

229

9

169

40

ProThrargarglyBroGlyLyBCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100

81

61

ВР

AA167582 AA167582 (first entry)

11-FEB-2002

290 CCGACTCGTCGAAAACCGGGTAAATGCCCGGTAAACCTATGGCCAGTGTCTGATGCTGAAC

349

289

```
The invention relates to a DNA sequence encoding an analog of a mammalian serine protease inhibitor protein. The analog comprises at least eight expetable residues and possesses serine protease inhibitor activity, and at least one operational element consisting of a promoter, an operator, terminator codon. The DNA is useful in recombinant DNA techniques for directing the production of a serine protease inhibitor protein, e.g. leukocyte elastase or trypsin. The present sequence represents the DNA sequence coding for ompA-secretory leukocyte protease inhibitor (SLPI)
                                                                                                                                                                                                                                                                                                                                                                           New DNA sequences, useful in recombinant DNA techniques for directing the production of a serine protease inhibitor protein, e.g. leukocyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                           Serine protease inhibitor protein; recombinant; leukocyte elastase; trypsin; secretory leukocyte protease inhibitor; SLP1; ds.
                                                                                                                                                                                                                                                                                                                    Thompson RC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 460 BP; 123 A; 114 C; 125 G; 98 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    460
112
11
14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                     Stetler GL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (1-460)
sequence coding for ompA SLPI
                                                                                                                                                                                                                                                                                                                     Bandyopadhyay PK, Eisenberg SP,
                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 3; Col 36; 37pp; English.
                                                                                                                                                                                    84US-00678222.
85US-00803471.
86US-00890526.
87US-00031846.
90US-00563832.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-613-105-2 (1-132) x AAI67582
                                                                                                                                                          98US-00158085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3,41e-48
645.00
88.64%
84.85%
84.65%
                                                                                                                                                                                                                                                                                                                                                                                                          elastase or trypsin.
                                                                                                                                                                                                                                                                                          (AMGE-) AMGEN INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
                                                                         Ното варіепв.
                                                                                                   JS6291662-B1
                                                                                                                                                          22-SEP-1998;
                                                                                                                                                                                       05-DEC-1984;
02-DEC-1985;
                                                                                                                                                                                                                                                              22-JUL-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                               18-SEP-2001
                                                                                                                                                                                                                    29-JUL-1986
                                                                                                                                                                                                                                30-MAR-1987
                                                                                                                                                                                                                                               06-AUG-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
DB:
 ò
```

```
Query Match:
                                                                                                                                                                                                                                               Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT
셤
                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                           용
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
          ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This invention relates to a novel fusion protein comprising a first protease inhibitor comprising an alphal-antitrypsin or its functionally active portion and a second protease inhibitor or its functionally active protein. The fusion proteins of the invention may act as an inhibitor of
                                CCGCCGAACTTCTGCGAAATGGACGCCCAGTGTAAACGAGATCTGAAATGCTGTATGGGT 409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       with a disorder such as emphysema, asthma, comprises a first protease inhibitor comprising alpha 1-antitrypsin and a second protease inhibitor.
                                                                                                                                                                                                           rSLAP1, gene, ds, Alzheimer's disease, tumour angiogenesis, malaria, emphysema, asthma; chronic obstructive pulmonary disease; cystic fibrosis, otitis media; otitis external; HIV; psoriasis; eczema; human immunodeficiency virus; atopic dermatitis; muscular dystrophy; herpes, ulceration; sepsis, rheumatoid arthritis; periodontal disease; tumour metastasis; osteoporosis; Paget's disease; scleroderma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel fusion protein useful for inhibiting protease activity associated
                                                                                                                                                                                                                                                                                                                                                           /*tag= a
/standard_name= "Ribosome binding site"
                                                                                                                                                                                                                                                                                                                                                                                          *tag= b
product= "rSLAP1 fusion protein"
[2. 1193
                                                      MetCysGlyLysSerCysValSerProValLysAla
                                                                   ATGTGCGCCAAATCTTGTGTTTCCCCCGGTAAAAGCA
                                                                                                                                                                                       DNA sequence encoding rSLAP1 fusion protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag= e
/note= "SLPI coding region"
                                                                                                                                                                                                                                                                                                                                                                                                                          /*tag= c
/note= "AAT coding region"
1194. .1196
                                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag= d
/note= "linking codon"
1197. .1517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 3; Page 89-90; 134pp; English.
                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                 glomèrulonephritis; hypertension
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pemberton
                                                                                                                       뮵
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-DEC-2000; 2000US-0256699P.
20-NOV-2001; 2001US-0331966P.
                                                                                                                      standard; DNA; 1525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-DEC-2001; 2001WO-US049256
                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ARRI-) ARRIVA PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                . .1520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Barr PJ, Gibson HL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2002-500631/53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       P-PSDB; AAU99884.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200250287-A2
                                                                                                                                                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                   misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                   misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   misc feature
                                                                                                                                                                 07-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-JUN-2002
                                                                                                                                                                                                                                                                                                                Synthetic
                                350
                                                                          410
                                                                                                                       ABK88025
                                                                                                                                           ABK88025;
          101
                                                     121
                                                                                                                                                                                                                                                                                                      Homo
                                                                                                          CDS
                              8
                                                                         g
                                                     ઠે
           ઠે
```

```
procease activity. The fusion protein of the invention is useful for inhibiting procease activity associated with a disorder such as emphysema, asthma, chronic obstructive pulmonary disease, cystic fibrosis, citiis media, otitis external or HIV infection, or for transitionary disease, cystic an individual suffering from or at risk for a disease or disorder involving unwanted procease activity. The proteins are useful for treating demandlogical diseases such as atopic dermatitis, eczema and psoriasis, in inflammatory responses to viral infection, and for treating herpes infection, corneal or epidermal ulceration, chronic non-healing wounds, sepsis, rheumatorid arthritis, periodontal disease, tumour metastasis and tumour angiogenesis, gastric ulceration, osteoporosis, Paget, a disease, uppertending and malarial bacterial infection, Alzheimer's disease, hypertendion and muscular dystrophy. The present sequence represents the DNA encoding the rSLAPI fusion protein of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ||| ||||||||::::::
1119 TTCGTTTTTCTGATGATCGAGAACACTAAAAAGCCCATTGTTTATGGGTAAGGTTGTC 1178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1179 AACCCAACTCAGAAGATGTCCGGAAAGTCTTTCAAGGCCGGTGTTTGTCCACCAAAGAAG 1238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1239 rccgcrcaargrirgagaracaagaagccagaargrcaarccgacrggcaargrccaggr 1298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1299 AAGAAGAGATGTTGTCCAGACACTTGTGGTATCAAGTGTCTAGACCCCAGTTGACACCCCA 1358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AsnProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMet 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -----LeuAlaLeuGlyThrLeuAla 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              malaria, emphysema, asthma, chronic obstructive pulmonary disease; SLPI; cystic fibrosis; otitis media; otitis external; HIV; psoriasis; eczema; human immunodeficiency virus, atopic dermatitis; muscular dystrophy; herpes; ulceration; sepsis; rheumatoid arthritis; periodontal disease; tumour metastasis; tumour anglogenesis; osteoporosis; paget; s disease; glomerulonephritis; scleroderma; Alzheimer's disease; hypertension.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Secretory leukoprotease inhibitor; human; gene; ds; protease inhibitor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20 ProTrpAlaValGluGlySerGlyLy8SerPheLy8AlaGlyValCy8ProProLy8Ly8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AsnProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SeralaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LysLysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA encoding human secretory leukoprotease inhibitor (SLPI) protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1525 BP; 467 A; 287 C; 314 G; 457 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1525
112
5
9
7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1479 GGTATGTGGTAAGTCCTGTGTTTCCCCAGTCAAGGCC 1517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120 GlyMetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (1-1525)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ВР.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-613-105-2 (1-132) x ABK88025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7 PheProPheLeuValLeu---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  standard; DNA; 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5.3e-47
638.50
87.97%
84.21%
83.79%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                    the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABK88016;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABK88016
```

82

```
NOVX protein; biochemical stimulation; physiological stimulation; arcidiant; antiarteriosclerotic; hypotensive; cytodetatic; anorectic; antirheumatic; antiarthritic; antidiabetic; nephrotropic; dermatological; immunosuppressive; anti-HIV; antidiabetic; neuroprotective; noctropic; antidepressive; anti-HIV; antidiahmatory; neuroprotective; antidepressant; antialersic; gynaecological; gene therapy; vaccine; NOVX-associated disorder; cardiomyopathy; atherosclerosis; hypertension; cancer; obesity; rheumatoid arthritis; diabetes; glomerulonephritis; psortasis; skin disorder; AIDS; inflammation; multiple sclerosis; Alzheimer's disease; Parkinson's disease; asthma; schizophrenia; depression; allergy; fertility disorder; gene; ss; NOVX27c.
86 ProGlyLysCysProValThrTyrGlyGlocysLeuMetLeuAsnProProAsnPheCys
                                                                                                                                 106 GluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGlyMetCysGlyLysSer
                                                                                                                                                                                                                                                                                           241 GAAATGGACGGTCAATGTAAGAGACTTGAAGTGTTGTATGGGTATGTGTGTAAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chillakuru RA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alsobrook JP, Anderson DW, Boldog FL, Burgess CE, Chillakuru Bedinger SR, Gerlach VL, Gorman L, Gould-Rothberg BE, Guo X; Jeffers ME, Ji W, Li L, Malyankar UM, Miller CE, Murphey R; Patturajan M, Peyman JA, Rastellii L, Rieger DK, Shenoy SG; Smithson G, Starling G, Taupier RJ, Voss EZ, Zhong H, Zhong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human NOVX27c protein cDNA sequence.
                                                                                                                                                                                                                                                                                                                                                                CysvalSerProvalLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                     301 TGTGTTTCCCCAGTCAAGGCC 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             05-DEC-2001; 2001US-0336600P.
07-DEC-2001; 2001US-0338285P.
17-DEC-2001; 2001US-0341346P.
17-DEC-2001; 2001US-0341477P.
17-DEC-2001; 2001US-0341540P.
20-DEC-2001; 2001US-0344297P.
31-DEC-2001; 2001US-0344297P.
11-APR-2002; 2001US-0344297P.
15-MAY-2002; 2002US-0380981P.
15-MAY-2002; 2002US-0380981P.
17-MAY-2002; 2002US-0380981P.
18-MAY-2002; 2002US-0380981P.
28-MAY-2002; 2002US-0380981P.
29-MAY-2002; 2002US-038094024P.
07-AUG-2002; 2002US-0401788P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2002US-00401788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADE95613 standard; cDNA; 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          03-DEC-2002; 2002WO-US038594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         02-DEC-2002; 2002US-00406353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12-FEB-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2003050245-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-OCT-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADE95613;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADE95613

ADE8

AAC

ADE8

XXX

ADE8

XXX

ADE8

XXX

ADE8

XXX

ADE8

A
                                                                                               ò
                                                                                                                                                             셤
                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                               유
                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                          유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This invention relates to a novel fusion protein comprising a first protease inhibitor comprising an alphal-antitrypsin or its functionally active protein and a second protease inhibitor or its functionally active active portion and a second protease inhibitor or its functionally active protein. The fusion proteins of the invention may act as an inhibitor of protease activity. The fusion protein of the invention is useful for inhibiting protease activity associated with a disorder such as emphysema, asthma, chronic obstructive pulmonary disease, cystic inhibiting protease activity pulmonary disease, cystic fibrosis, ottis media, otitis external or HIV infection, or for treating an individual suffering from or at risk for a disease or disorder involving unwanted protease activity. The proteans are useful for treating dermatological diseases activity. The proteans are useful for treating dermatological diseases to viral infection, and for treating protaasis, in inflammatory responses to viral infection, and for treating wounds, sepsis, rheumatoid arthritis, periodontal disease, tumour metastasis and tumour anglogenesis, gastric ulceration, cornel or gastrophy. The paget's disease, glomerullonephritis, scleroderma, malaria, bacterial infection, Alzheimer's disease, hypertension and muscular dystrophy. The present sequence represents the DNA encoding the human secretory is element to the protein of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TACAAGAAGCCAGAATGTCAATCCGACTGGCAATGTCCAGGTAAGAAGAGATGTTGTCCA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel fusion protein useful for inhibiting protease activity associated with a disorder such as emphysema, asthma, comprises a first protease inhibitor comprising alpha 1-antitrypsin and a second protease inhibitor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SerGlyLysSerPheLysAlaGlyValCysProProLysLysSerAlaGlnCysLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLysLysArgCysCysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /*tag= a
/product= "Secretory leukoprotease inhibitor"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 321 BP; 92 A; 67 C; 80 G; 82 T; 0 U; 0 Other;
                                                                                                                                                                                               partial
'note= "No start or stop codon shown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         321
107
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-613-105-2 (1-132) x ABK88016 (1-321)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure, Page 32; 134pp; English.
                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pemberton
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-DEC-2000; 2000US-0256699P.
20-NOV-2001; 2001US-0331966P.
                                                                                                                                                                                                                                                                                                                                                                                                                                18-DEC-2001; 2001WO-US049256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.71e-47
635.00
100.00%
100.00%
83.33%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ARRI-) ARRIVA PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PJ, Gibson HL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-500631/53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              P-PSDB; AAU99874
                                                                                                                                                                                                                                                                                                  WO200250287-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                27-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Barr
```

Ξ̈

요 ò

Wed

```
Query Match
DB:
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                               This invention relates to novel NOVX proteins, and the DNA sequence which encode them, having properties related to stimulation of biochemical or physiological responses in a cell, a tissue, an organ or an organism.

Compounds which modulate the proteins of the invention may have cardiant, antiarteriosclerotic, hypotensive, cytostatic, anorectic, antirheumatic, antiarteriosclerotic, nephrotropic, dermatological, antirheumatic, immunosuppressive, anti-HIV, antinflammatory, neuroprotective, corropic, antipportatic, antiparkinsonian, antiathmatic, neuroleptic, antidepressant, antiallergic or gynaecological activities. The DNA sequences of the invention may be useful for gene therapy whilst the protein sequences of the invention may be useful for treating a syndrome corrected that a human disease. The invention may be useful in the manufacture of a medicament for treating a syndrome cassociated with a human disease. The invention may be useful in diagnosing, treating or preventing NOVX-associated disorders, for example cardiomyopathy, atherosclerosis, hypertension, cancer, obesity, chemmatoid arthritis, diabetes, glomeculomephritis, psoriasis, skin disease, asthma, schizophrenia, depression, allergies or fertility disorders. The nucleic acids may further be used as characteristic and pharmacogenomics. The present sequence is the cDNA sequence medicine, and pharmacogenomics. The present sequence is the cDNA sequence which encodes the human NOVX27C protein of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsnProProAsnPheCys 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GluMetAspGlyGlnCysLysArgAspLeuLysCysRetGlyMetCysGlyLysSer 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAACCAAGGAGGAAG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGCCATGTGTGGGAAATCC 300
                                                     New NOVX polypeptides and nucleic acids, useful for preventing or treating NOVX-associated disorders, e.g. cancer, cardiomyopathy, atherosclerosis or diabetes, and in chromosome mapping, tissue typing or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLysLysLysArgCysCysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCTGCCCCAGTGCCTTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TACAAGAAACCTGAGTGCCAGAGTGACTGGCCAGGGAAGAAGAGAGATGTTGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AspThrCysGly11eLysCysLeuAspProValAspThrProAsnProThrArgArgLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerGlyLysSerPheLysAlaGlyValCysProProLysLysSerAlaGlnCysLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        G; 77 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   321
107
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                          Claim 20; SEQ ID NO 145; 211pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (1-321)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    recerricecerereaaaeer 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81 A; 76 C; 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-613-105-2 (1-132) x ADE95613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.71e-47
635.00
100.00%
100.00%
83.33%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
                                                                                                 pharmacogenomics.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 321 BP;
          WPI; 2003----
P-PSDB; ADE95614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 43
유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
```

AAN60463 standard; DNA; 324

AAN60463 ID AAN6

```
Serine protease inhibitor analogue having similar properties to a protein isolated from parotid secretions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlumethappglyglnCysLysArghapLeuLysCysCysMetGlyMetCysGlyLysSer 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAAATGGACGCCCAGTGTAAACGAGATCTGAAATGCTGTATGGGTATGTGCGGCAAATCT 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tacadada accesa de centros de construcción de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The sequence directs synthesis of a single chain polypeptide serine procease-inhibitor, which believed to have at least 2 active sites, 1 exhibiting leukocyte-elastase-inhibiting properties and the other exhibiting activity against trypsin. See also AAN60464-69 and AAP60562-66. (Updated on 25-MAR-2003 to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsnProProAsnPheCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLysLysArgCysCysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ASDINCYSG1y11eLySCySLeuAspProValAspThrProAsnProThrArgArgLyS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerGlyLysSerPheLysAlaGlyValCysProProLysLysSerAlaGlnCysLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New synthetic DNA sequences for directing microbial synthesis - for prodn. of single poly:peptide chain serine protease inhibitor having leukocyte elastase and trypsin inhibitory sites.
                                                                                                                                                                                                                                                                                                             Serine protease-inhibitor, parotid; leukocyte-elastase-inhibitor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Thompson RC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 324 BP; 87 A; 85 C; 88 G; 64 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          324
000
000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Stetler GL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-613-105-2 (1-132) x AAN60463 (1-324)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 14; 59pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (SYND ) SYNERGEN BIOLOGICAL INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bandyopadh PK, Eisenberg SP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       84US-00678822.
85US-00803471.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           85WO-US002385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.73e-47
635.00
100.00%
100.00%
                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                            trypsin-; inhibitor; ss
                                                                        (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1986-169458/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      P-PSDB; AAP60562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04-DEC-1985;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  02-DEC-1985;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-DEC-1984;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
                                                                        25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO8603519-A.
                                                                                                              01-JAN-1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19-JUN-1986
                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
AAN60463;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                      Serine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
```

ठ

```
181 CCGGGTAAATGCCCGGTAACCTATGGCCAGTGTCTGATGCTGAACCCGCCGAACTTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                        Bandyopadhyay PK,
                                                                                                                            ВP
                                                                                                                                                                                                                                                                                                                                          84US-00678822.
86US-00890526.
86US-00903471.
87US-00031846.
90US-00563832.
                                                                                                                                                                                                                                                                                                                          94US-00279056
                                                                                                                            AAX16236 standard; DNA; 324
                                                                                                                                                                  (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1999-166640/14.
                                                                                                                                                                                                                                      acute leukemia; ss.
                                                                                                                                                                                                                                                                                                                                                                                                     (AMGE-) AMGEN INC.
                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                          22-JUL-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                        Stetler GL,
                                                                                                                                                                 20-MAR-2003
19-APR-1999
                                                                                                                                                                                                                                                                                    US5871956-A
                                                                                                                                                                                                                                                                                                      16-FEB-1999
                                                                                                                                                                                                                                                                                                                                             06-DEC-1984
                                                                                                                                                                                                                                                                                                                                                     29-JUL-1986
03-SEP-1986
                                                                                                                                                                                                                                                                                                                                                                                  06-AUG-1990
                                                                                                                                                                                                                                                                                                                                                                         30-MAR-1987
                                                                                                                                                                                                                                                                  Synthetic.
                              106
                                                                   126
                                                                                                                                                AAX16236;
                                                                                                                            8XCCCCCCCCCCCCCCX8X14112X5X5X33333XX4X6X5X5X5X5X5X5X5X5X5X5X5X
                             ò
                                               요
                                                                   ò
                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TACAAAAAACCGGAATGCCAGTCCGACTGGCAGTGCCCGGGTAAAAAACGTTGTTGCCCG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 86 ProGlyLygCy8ProValThrTyrGlyGlnCy8LeuMetLeuAsnProProAsnPheCy8 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AspThrCysGly1leLysCysLeuAspProValAspThrProAsnProThrArgArgLys 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SerGlyLysSerPheLysAlaGlyValCysProProLysLysSerAlaGlnCysLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLysLysArgCysCysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTGGTAAAAGCTTCAAAGCTGGCGTATGCCCGCCGAAAAAATCCGCGCAGTGTCTGCGG
                                                                                                                                                                                                                                                                                                                                                                         New synthetic DNA sequences for directing microbial synthesis - for prodn. of single poly:peptide chain serine protease inhibitor having leukocyte elastase and trypsin inhibitory sites.
                                                                                                                                                                                                                                                                                                                                                                                                                                The sequence directs synthesis of a secretory leukocyte protease-inhibitor. See also AAN60463, AAN60465-69 and AAP60562. AAP60564-66. (Updated on 25-MAR-2003 to correct PA field.)
                                                                                                                                                                   protease-inhibitor; parotid; leukocyte-elastase-inhibitor;
                                                                                                                                     Synthetic sequence capable of directing microbial synthesis of secretory leukocyte protease-inhibitor.
                                                                                                                                                                                                                                                                                                                          Thompson RC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 324 BP; 86 A; 85 C; 87 G; 66 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    324
107
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                          Bandyopadh PK, Eisenberg SP, Stetler GL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indel8:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JS-10-613-105-2 (1-132) x AAN60464 (1-324)
                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 15; 59pp; English
           CysvalSerProvalLysAla 132
                       (SYND ) SYNERGEN BIOLOGICAL INC
                                                                    BP.
                                                                                                                                                                                                                                                                          84US-00678822.
85US-00803471.
                                                                                                                                                                                                                                                       85WO-US002385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.73e-47
635.00
100.00%
100.00%
83.33%
                                                                    AAN60464 standard; DNA; 324
                                                                                                        (revised)
(first entry)
                                                                                                                                                                            trypsin-; inhibitor; ss
                                                                                                                                                                                                                                                                                                                                            WPI; 1986-169458/26.
P-PSDB; AAP60563.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                        04-DEC-1985;
                                                                                                                                                                                                                                                                          06-DEC-1984;
02-DEC-1985;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gnment Scores:
                                                                                                         25-MAR-2003
01-JAN-1980
                                                                                                                                                                                                                                     19-JUN-1986.
                                                                                                                                                                                                                  WO8603519-A
                                                                                                                                                                                               Synthetic.
                                                                                       AAN60464;
                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99
            126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match:
DB:
                                                                                                                                                                   Serine
                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
```

ò

ð

```
The present invention describes a DNA sequence (A) encoding an analogue of a mammalian serine protease inhibitor (B). The DNA sequences and recombinant methods allow manufacture of a class of inhibitors of e.g. recombinant methods allow manufacture of a class of inhibitors of e.g. cathepsin G, elastase, and trypsin, with different specificities. The recombinant serine protease product can be directed to act intractulularly or extracellularly and is useful in treating conditions caused by a disturbance in the native protease/protease inhibitor balance such as emphysema, arthritis, glomerulonephritis, peridontitis, muscular dystrophy, tumour invasion, sepsis, and acute leukemia. (A) allows (B) to be recombinantly produced in sufficient quantities and purities so as to provide economical pharmaceutical compositions. (B) is resistent to heat, acid, and a variety of proteolytic enzymes, is thermodynamically stable in extracellular conditions, and extibite a high degree of self assembly forming an active tertiary structure in the absence of blochemical circuminations. (B) recombinant serine protease inhibitors. (Updated on direct manufacture of recombinant serine protease inhibitors. (Updated on C) correct PR field.)
240
                                                                                                        125
                                                                                                                                                                                                      241 GAAATGGACGGCCAGTGTAAACGAGATCTGAAATGCTGTATGGGTATGTGCGGCAAATCT 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New DNA sequence encoding mammalian serine protease inhibitor - useful for recombinantly producing inhibitors with different specificities and treating diseases such as emphysema, arthritis, muscular dystrophy, and tumor invasion.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Serine protease inhibitor; human; emphysema; arthritis; peridontitis; muscular dystrophy; tumour invasion; glomerulonephritis; sepsis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Serine protease inhibitor direct manufacturing DNA sequence (SLPI).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Thompson RC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 324 BP; 86 A; 85 C; 87 G; 66 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eisenberg SP,
                                                                                                                                                                                                                                                                                                                    CysvalSerProvalLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                 301 TGTGTTTCCCCGGTAAAAGCA 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 2; Col 29; 37pp; English.
```

Score:		200 200			
			Marchan.	2.0	
Percent Similarity	imilarity:	100.00%	Conservative:		
Best Loca	Best Local Similarity:	100.00\$	Mismatches:	0	
Query Match:	ch:	83.33%	Indels:	0	
DB:		2	Gaps:	0	
US-10-613	-105-2 (1-132)	US-10-613-105-2 (1-132) x AAX16236 (1-324)	324)		
ò	26 SerGlyLys	SerPheLysAlaGl	YValCysProProLys	SerGlyLysSerPheLysAlaGlyValCysProProLysLysSerAlaGlnCysLeuArg	45
qa	1 TCTGGTAAA	AGCTTCAAAGCTGG	CGTATGCCCGCCGAAA	TCTGGTAAAAGCTTCAAAGCTGGCGTATGCCCGCCGAAAAATCCGCGCGAGTGTCTGCGG	09
ò	46 TyrLysLys	ProGluCysGlnSe	rAspTrpGlnCysPro	TyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLysLysArgCysCysPro	65
qq	61 TACAAAAA	CCGGAATGCCAGTC	CGACTGGCAGTGCCCG		120
ò	66 AspThrCys	GlyileLysCysLe	uAspProValAspThr	AspThrCysGlylleLysCysLeuAspProValAspThrProAsnProThrArgArgLys	85
qq	121 GACACCTGC	GGCATCAAATGCCT	GGATCCGGTTGATACC	GACACCTGCGGCATCAAATGCCTGGATCCGGTTGATACCCCGAACCCGACTCGTAAA 1	180
ò	86 ProGlyLys	CysProValThrTy	rGlyGlnCysLeuMet	ProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsnProProAsnPheCys	105
QQ	181 CCGGGTAAA	TGCCCGGTAACCTA	TGGCCAGTGTCTGATG		240
ò	106 GluMetAsp	GlyGlnCysLysAr	gAspLeuLysCysCys	GluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGlyMetCysGlyLysSer	125
g	241 GAAATGGAC	GGCCAGTGTAAACG	AGATCTGAAATGCTGT.		300
٥٨	126 CysValSer	CysValSerProValLysAla 1	132		
QD	301 TGTGTTTCC	TGTGTTTCCCCGGTAAAAGCA 3	321		

Mis rose Cismir (Conso)

AX069252 Sequence X04503 Human SLPI CQ727371 Sequence AR270708 Sequence	AX328399 Sequence AX334507 Sequence	AX577960 Sequence AX7780010 Sequence AX780010 Sequence X04470 Human mRNA	BD203743 Human nuc AX014898 Sequence BC020708 Homo Bapi	CQ413516 Sequence AX772818 Sequence	AX670655 Sequence AX670643 Sequence IO8404 Sequence 1	AX670647 Sequence A08111 Synthetic A	A08106 Synthetic A A08107 Synthetic A	AUBLIZ Synthetic A AOB10B Synthetic A AOB110 Synthetic A	A08105 Synthetic A A08109 Synthetic A	X04502 Human SLPI I01501 Sequence 2	AL035660 Human DNA M57446 Porcine ant	AF178426 Rattus no AF151982 Rattus no	AF421377 Rattus no AX642233 Sequence	AX642236 Sequence AX577885 Sequence	U88093 Mus musculu U94341 Mus musculu	BC028509 Mus muscu	AR270461 Sequence	AKOB/991 Sequence AY346135 Ovis arie	AC094865 Rattus no AC112730 Rattus no	AF205374 Mus muscu	COSTATION CONTROL OF THE COSTATION C	ALS90429 Mouse DNA	AC132741 KattuB no AX334505 Seguence	AX335289 Sequence	M31216 Porcine ute	CQ408469 Sequence BD264991 Compositi	AR238394 Sequence	AX36610 Sequence	BV163497 RPAMMSEQ0 BV095123 RPAMMSEQ0	AJ005356 Macropus	AYOUGH HOMO BADI	AY358822 Homo Bapt	BC019734 Mus muscu AF275314 Trichosur	AF488306 Homo sapi X78981 T.trichlura AB076019 Tribolodo
6 AX069252 9 HSSLIPR 6 CQ727371 6 AR270708	AX328399 AX334507	AX577960 AX577960 AX780010 HSALPR	BD203743 AX014898 BC020708	5 CQ413516 5 AX772818	5 AX670655 5 AX670643 5 IO8404	AX670647 A08111	A08106 A08107	A08108	A08105 A08109	HSSLIPG 101501	HS30012	10 AF178426	10 AF421377	AX642236	10 MMU88093	10 BC028509	10 MMU/3004 5 AR270461	AK06/991 AY346135	2 AC094865 2 AC112730	10 AF205374	CQ402085	10 ALS90429	2 AC132741 5 AX334505	5 AX335289	PIGUF52	5 CQ408469 5 BD264991	5 AR238394	5 AX366610 5 AX366610	L1 BV163497 L1 BV095123	# MEA005356	AY038181	9 AY358822	LO BC019734 1 AF275314	9 AF488306 3 TTTT52 5 AB076019
550 594 594																		194 2737		4090			12105 411											
1000.000.0000.0000.0000.0000.0000.0000.0000	100.0	0000	10000	100.0	83.8 83.3 83.3	83.3 82.9	81.8 81.8	8 1 6 2 7 6 8 7 7 6	80.08 9.09	71.8	70.5	63.3	61.8	9.09	9.09	8.09	60.8	45.7	39.6 9.0	37.4	37.2	36.4	34.8 34.8	34.6	34.3	31.9	29.4	200 200 4.4.	27.1	25.9	24.6	24.6	23.0	23.6 23.6 23.6
762 762 762 762	762	762	762 762 762	762	638.5 635 635	635	623	623	614 614	547	537.5	482.5	471 471	463.5	463.5	463.5	463.5	348 316.5	302	285	283.5	277.5	265 264	264	261	243 224	224	224 224	206.5	197	187.5	187.5	183	180 180 180
0. 7. 80	9 10	12 13 13 14	15	18	20 21 22 22 23	233	25	22 2 2 2 2 3 9 9 9 9 9 9 9 9 9 9 9 9 9 9	330	32	0 3 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	36		υ	4 4	44	4 4 V 0	4 4 8	0 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				C 56			61	63	64	0 0 0		0 7 0	72	-73	75 76 77
5.1.6 Compugen Ltd.	2n model	Search time 3545 Seconds without alignments) 86 858 Million cell undates/sec		RDLKCCMGMCGKSCVSPVKA 132			168	rs: 9053458					100 10000 me / 1000 1000 1000 1000 1000 1000 1000 1	T=0	INTRO-SIGNIANT CONTRACTOR TIMES OF A PAIR OF A STANDE FOR A STAND ANY TO STAND AND TO STAND AND	170440_18687 -NCPU=6 -ICPU=3	OCK=100 -LONGLOG 3APOP=10 -XGAPEXT=0.5 -FGAPOP=6	JEXT=7										>	<u>u</u>			Description		AF114471 Homo sapi AX778065 Sequence I01502 Sequence 3
GenCore version 5.1 Copyright (c) 1993 - 2004 Com	OM protein - nucleic search, using frame_plus_p2n model	Run on: October 24, 2004, 03:15:16; Search (without 1760 88)	Title: US-10-613-105-2 Perfect score: 762	e: 1 MKSSGLFPFLVLLALGTLAP	, Xgapext	Fgapop 6.0 / Fgapext 7.0 Delop 6.0 / Delext 7.0	, 236448497	Total number of hits satisfying chosen parameters	Minimum DB seq length: 0 Maximum DB seq length: 200000000	Minimim	Foot Floorstand Maximum Match 100% Listing first 100 summaries		Ommand line parameters: MODEL=frame+ p2n.model -DEV=xlh O-/	=/CGNZ_I/OSFIO_BDOOL_N/OSIOOJSIOS/IMMALZZIOZO B=GenEmbl -QFNT=fastap -SUFFIX=rege -MINWATCH=0	-UNILEBILE -SIAKET -ENDE-1 -FAIRA-BIOSUMMOS IKANASIMUMINIS - LANDOR - DOCALIGN-200 - THE XORRE-POR - THE MAXE100 - THR MIN-0 - ALIGN-45 - MODE	IIFMI=DLO -NOKM=6XL -HEAFSIZE=500 -MINDEN=0 -M HER=US10613105_@CGN_1_1_3731_@runat_22102004_1) MMAP -LARGEQUERY -NEG SCORES=0 -WAIT -DSPBLO :V_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XG	;APEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DEL	ы. Б		3: 92 a.m.: * 4: gb_om: *			(;;	2.6		Pred. No. is the number of results predict	ater than or equal			Result No. Score Match Length DB ID	7 7 100 0 399 6	2 762 100.0 399 9 AF114471 3 762 100.0 551 6 AX778065 4 762 100.0 565 6 101502

Db 181 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 240 Qy 81 ProthrayArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100 241 CCAACAAGGAGGAAGCTTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC 300 Qy 101 ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCygNetGly 120 Db 301 CCCCCCAATTTTTGTGAGATGATGATGATGATTGATGCTTGAGTGTTGCATGGC 360 Qy 121 MetCysGlyLysSerCysValSerProValLysAla 132	RESULT 2 AF114471 LOCUS DEFINITION Homo sapiens secretory leukocyte proteinase inhibitor precursor, mRNA, complete cds. ACCESSION AF114471.1 GI:4378758 KEYNORDS SOURCE Homo sapiens (human) ORGANISM Homo sapiens (human) CRANISM Homo sapiens (human)	dae, Homo. J.L. ry leukocyte lial cells J.L.	g.	80	Alignment Scores: Alignment Scores: Pred. No.: 762.00 Matches: Score: Percent Similarity: 100.00\$ Matches: Conservative: Matches: Conservative: Descent Similarity: 100.00\$ Matches:
78 172 22.6 897 9 HS447F331 AL591713 Novel hum 79 171 22.4 2812 3 AF036161 AF036161 Trichuris 80 165.5 21.7 374 6 AX716767 CR456977 Homo sapi 82 165.5 21.7 379 6 AX716759 AX716758 Sequence 83 165.5 21.7 390 6 AX716759 AX716758 Sequence 84 165.5 21.7 486 9 AX212888 AX716758 Sequence 85 165.5 21.7 500 6 AX588473 AX588473 Sequence 86 165.5 21.7 515 6 AX8897924 AX8897924 Sequence 87 165.5 21.7 515 6 AX897924 Sequence 88 165.5 21.7 515 6 AX897924 Sequence 89 165.5 21.7 566 9 BC046106 BC046106 Homo sapi 99 165.5 21.7 567 6 CQ727374 BC033916 Homo sapi 91 165.5 21.7 634 6 BD203758 BD203758 Human nuc	165.5 21.7 634 6 BD222208 165.5 21.7 634 6 AX014329 165.5 21.7 634 6 AX014913 165.5 21.7 643 6 AX588136 165.5 21.7 643 6 AX588136 165.5 21.7 1077 6 AX716759 165.5 21.7 1098 6 AX716751 164.5 21.6 519 6 AX588174 164.5 21.6 577 6 AX588137	DNA linear PAT iata; Vertebrata; Eute	. 4056 405	Alignment Scores: 3.18e-49 Length: 399 Pred. No.: 76.00 Marches: 132 Score: 100.00\$ Conservative: 0 Best Local Similarity: 100.00\$ Mismatches: 0 Query Match: 6 Gaps: 0 US-10-613-105-2 (1-132) x AX302535 (1-399)	Qy 1 MetrysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro 20 bb 1 ATGAAGTCCAGCGCCTCTTCCTGGTGCTGCTTGCCTGGGAACTCTGGCACT 60 Qy 21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysEvsSer 40 bb 61 TGGGCTGTGGAAGGTCTTGAAAGTCCTTCAAAGCTGCTCTCCTCCTCAAAGAAATCT 120 Qy 41 AlaGlnCysEcuArgTrLysLysEproGluCysGlnSerPspTrpGlnCysProGlyLys 60 Qy 41 AlaGlnCysEcuArgTrLysLysEproGluCysGlnSerPspTrpGlnCysProGlyLys 60 Db 121 GCCCAGTGCCTTAGATACAAGAACCTGAGTGCCAGAGTGATCTCAGGGAAG 180 CQy 61 LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn 80

8 6 ઠે 셤 8 g ò g 쉽

ठ

요

ò

```
PAT 21-MAY-1993
                                                                                                                   120
                                                               100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         254 CCAACAAGGAGGAAGCCTGGGAAGTGCCCACTGACTTATGGCCAATGTTTGATGCTTAAC 313
                                                                                                                                   314 CCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGGGTGACTTGAAGTGTTGAAGGGG 373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 298
                                      194 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      80
                                                                                                                                                                                                                                                                                                                                                 Unclassified.

1 (bases 1 to 565)

Heinzel, R., Appelhans, H., Gassen, H.G., Machleidt, W. and Seemuller, U.

DNA sequences coding for proteins having the biological activity of WISI-type I inhibitors, biotechnological methods for the preparation of said proteins and pharmaceutical compositions containing said proteins

Patent: US 4845076-A 3 04-UUL-1989;

Grunenthal GmbH;

DE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn
                                                                                                                   101 ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MetlysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         59 ATGAAGTCCAGGGGCCTCTTCCTGGTGCTGCTTGCCCTAGGAACTCTGGCACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  41 AlaGinCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            179 ecccaerecerraearacaacaaaccreacreceaereacreecaecaerereceaerae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LysArgCysCysProAspThrCysGly11eLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                565
0
0
0
0
0
                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                  565 bp 88-DNA
Sequence 3 from Patent US 4845076.
101502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
1. .565
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-613-105-2 (1-132) x I01502 (1-565)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.52e-49
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                 GI:270158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                 101502.1
                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                                                                                                                                                          Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
Pred. No.:
                                                                81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                             RESULT
I01502
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score:
                                                               ઠે
                                                                                   g
                                                                                                                   ઠ
                                                                                                                                              셤
                                                                                                                                                                         ò
                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                PAT 14-JUL-2003
                                                                                                      180
                                                                                                                                                            240
                                                                                                                                                                                     ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Haferlach, T., Schoch, C., Kern, W., Kohlmann, A., Schnittger, S., Dugas, M., Eils R., Brors, B. and Mergenthaler, S.
Novel genetic markers for leukemiss Patent: WO 03039443-A 222 15-MAY-2003;
Deutsches Krebsforschungszentrum (DE);
Ludwig-Maximilian-Universitaet Muenchen (DE); Haferlach, Torsten, PD Dr. (DE); Schoch, Claudia (DE); Kern, Wolfgang (DE)
Location/Qualifiers
                                       CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC 300
                                                                                                                                                                                                                                                         CCCCCCAATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                   80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                            AGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCCAAAC
                                                                                                                                                                                                                                          | ProProAsnPheCysGJuMetAspGJyGJnCysLysArgAspLeuLysCysCysMetGJy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysEysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
1 ATGAAGTCCAGCGCCTCTTCCCCTTCCTGGTGCTGCCTTGCCCTGGGAACTCTGGCACT
                       TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProLysLysSer
                                                                                                                                   LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          551
0
0
0
0
                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                 551 bp DN
WO03039443.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .551
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-613-105-2 (1-132) x AX778065 (1-551)
                                                                                                                                                                                                                                                                                                                                                                          AX778065
Seguence 222 from Patent
AX778065
                                                                                                                                                                                                                                                                                                                                                                                                                    AX778065.1 GI:32695059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.41e-49
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                               sapiens (human)
sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ношо
                         21
                                                                              41
                                                                                                      121
                                                                                                                                 61
                                                                                                                                                           181
                                                                                                                                                                                     81
                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           41
                                                                                                                                                                                                                                           101
                                                                                                                                                                                                                                                                                                                                                   RESULT 3
AX778065
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORIGIN
```

8

ð g ò

ሯ

of

```
573 bp mRNA linear PRI 21-MAR-1995 for secretory leucocyte protease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo. I (bases I to 57). Stetler,G., Brewer,M.T. and Thompson,R.C. Isolation and sequence of a human gene encoding a potent inhibitor Of Inkocyte proteases
Nucleic Acids Res. 14 (20), 7883-7896 (1986)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MetlysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 TGGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCAAAAATCT
                                                                                                                           X04503.1 GI:36490 elastase inhibitor; secretory leucocyte protease inhibitor; trypsin inhibitor. Homo sapiens (human) Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                1. .573
/organisma-Homo sapiens"
/mol_type="mRNA"
/db_tref="taxon:9606"
/tisue_type="parotid gland"
1. .399
/note="unnamed protein product; SLPI-precursor"
                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .75
/note="Bignal peptide (AA -25 to -1)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              573
132
0
0
0
                                                                                                                                                                                                                                                                                                       Data kindly reviewed (15-SEP-1987) by Stetler Location/Qualifiers
76. .396 /
/product="mature SLPI (AA 1-107)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NFCEMDGQCKRDLKCCMGMCGKSCVSPVKA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          546. .552
/note="put. polyA signal"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      x HSSLIPR (1-573)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note="polyA site"
                                                                            HSSLIPR
Human SLPI mRNA fragment
inhibitor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.59e-49
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-613-105-2 (1-132)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    polyA_site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ٦
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match:
DB:
                                                                                                                                                                  SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ..
00
..
                                                                              LOCUS
DEFINITION
                                                                                                               ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                 JOURNAL
MEDLINE
PUBMED
COMMENT
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                CDS
                                                   RESULT 6
HSSLIPR
                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                              /codon_start=1
/protein_id="CAC27294.1"
/brotein_id="CAC27294.1"
/db_xref="G1:12579134"
/translation="MKSS9134"
/translation="MKSS9EPFLVLLALGTLAPWAVEGSGKSFKAGVCPPKKSAQCL
/YKKPECQSDWQCPGKKRCCPDTGTKCLDPVDTPNPTRRKPGKCPVTYGQCLMLNPP
NFCEMDGQCKRDLKCCMGMCGKSCVSPVKA"
                                                                                                                               PAT 25-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         resecrieresaasecreresaasrecricaaaseresesereserererererasaaarer 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TrpalavalGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LysArgCysCysProAspThrCysGlylleLysCysLeuAspProValAspThrProAsn 80
                                                                                                                                                                                                                    Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC
                                                                                                                               linear
                                                                                                                                                                                                                                                      Neilson, L. and Li, Z.
Treatment of endometriosis with antileukoprotease
Patent: WO 0101998-A 111-JAN-2001;
Reprogen, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             565
132
0
0
0
                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                       59. ... 457
/note="unnamed protein product"
                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                     1. .565
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                       AX069252 565 bp
Sequence 1 from Patent WO0101998.
AX069252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gape:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-613-105-2 (1-132) x AX069252 (1-565)
                                                                                                                                                                  AX069252.1 GI:12579133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.52e-49
762.00
100.00%
100.00%
                                                                                                                                                                                          Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81
                           359
                                                                            419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match:
DB:
                                                                                                     RESULT 5
AX069252
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ..
0
                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                       g
                                                                            용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                    ઠે
```

Db 319 CCCCCCAATTTCTGTGAGATGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGCC 378 Qy 121 MetCyeGlyLyeSerCysValSerProVallysAla 132	ified. solution for the detection of signaling tion for the detection of signaling tion for the detection of signaling to \$500938-A 1271 31-DEC-2002; Location/Qualifiers 1. \$54 /organism="unknown" /mol_type="genomic DNA" 4.76e-49 Length:	illarity: 100.00% Conservative: 0 Similarity: 100.00% Manatches: 0 Similarity: 100.00% Mismatches: 0 6 Gaps: 0 605-2 (1-132) x AR270708 (1-594)	Oy 1 McLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaBro 20	Qy 41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys 60	Db 199 AddAdATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCTGTTGACACCCCAAAC 258	Qy 101 ProProAsnPheCysGluMetAspGlnCysLysArgAspLeuLysCysCysMetGly 120 Db 319 CCCCCCAATTTCTGTGAGATGGCCAGTCCAGGGTGACTTGAAGTGTTCCATGGGC 378 Qy 121 MetCysGlyLysSerCysValSerProValLysAla 132 Db 379 ArgangGaAATTCTGTGGGGTGATGGATGGATTGAAGTTTGAAGTGTTCCATGGGC 378	SULT 9 328399 CUS AX328399 CUS Sequence 1 from Patent WO0190421. CESSION AX328399 RSION AX328399.1 GI:18098360 YWORDS Homo sapiens (human) ORGENISM Homo sapiens
Qy 61 LysargCysCysProAspThrCysGly11eLysCysLeuAspProValAspThrProAsn 80 Db 181 AAGAGTGTTGTCGAACTTGTGGCATCAAATGCCTGTTGACCCCCAAC 240 Qy 81 ProThrArgArgLysProGlyLysCysProValThrTytGlyGlnCysLeuMetLeuAsn 100 Db 241 CCAACAAGGAGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTAAC 300 Qy 101 ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120 Db 301 CCCCCCAATTTCTGGAGATGGCCAGTGCAGTGCAAGCGTAACTTGAAGTGTTGCATGGGC 360 Qy 121 MetCysGlyLysSerCysValSerProValLysAla 132 Qy 121 MetCysGlyLysSerCysValSerProValLysAla 132 Db 361 ATGTGGGAAATCCTGCGAAAGCT 396		AUTHORS Venter, C.J., Adams, M.C., Li, P.W. and Myers, E.W. TITLE Kits, such as nucleic acid arrays, comprising a majority of humanexons or transcripts, for detecting expression and other uses thereof JOURNAL Patent: WO 02068579-A 13305 06-SEP-2002; FEATURES Location/Qualifiers source	/organism="Homo sapiens" /mol_type="unassigned DNA" /db_xref="taxon:9606" ent Scores: 4.76e-49 Length:	Score: 762.00 Matches: 132 Percent Similarity: 100.00\$ Conservative: 0 Best Local Similarity: 100.00\$ Mismatches: 0 Query Match: 100.00\$ Indels: 0 DB: 6 Gaps: 0	1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro 	Oy 21 TrAALavBroser 40 1 TrAALavBroser 40 1 Db 79 TGGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGTCTGTCCTCCTAAGAAATCT 138 Oy 41 AlaGlnCysLaugTyrLysLysEysProGluCysGlnSerAspTrpGlnCysPrcGlyLys 60 Db 139 GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGCCAGGGAAGTGTCCAGGGAAG 198	Oy 61 LysargCysCysProAspThrCysGlylleLysCysLeuAspProValAspThrProAsn 80

DNA"

```
/mol_type="unassigned
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.76e-49
762.00
100.00%
100.00%
                                                                        Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score:
Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores
                                             Alignment Scores
                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 11
AX335376
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                       Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                       DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORIGIN
                                                                    Score:
                                                                                                                                                      8
                                                                                                                                                                      원
                                                                                                                                                                                               ò
                                                                                                                                                                                                                    원
                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Young, P.E., Augustus, M., Carter, K.C., Ebner, R., Endress, G., Horrigan, S., Soppet, D.R. and Weaver, Z. Cancer gene determination and therapeutic screening using signature gene sets Patent: WO 0194629-A 5016 13-DEC-2001; Avalon Pharmaceuticals (US)

1. 594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 09-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                        79 TGGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTGTCTTGTCCTTCTAAGAAATCT 138
                                                                                                                                                                                                                                                                                                           40
                                                                                                                                                                                                                                                                                                                                                                                               80
                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                                                                                                    78
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
Homo sapiens
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                         21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                              LysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                               MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                    Argandricchececrerrecerecresiscrecreseancresearcr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                              Rastelli, L. and Smithson, G. Method of detecting inflammatory lung disorders Patent: WO 0190421-A 1 29-NOV-2001; Curagen Corporation (US)
                                                                                                                                                                 594
0 0 0 0 0 0 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        594 bp Di
Sequence 5016 from Patent WO0194629.
AX334507
AX334507.1 GI:18125226
                                                                                      1. .594
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
                                                                                                                                                                                                                                          US-10-613-105-2 (1-132) x AX328399 (1-594)
                                                                           Location/Qualifiers
                                                                                                                                                              4.76e-49
762.00
100.00%
100.00%
                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
                                                                                                                                                      Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        319
                                                                                                                                                                                                                                                                                     19
                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                    199
                                                                                                                                                                                                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                                                                                                                                                                             259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 379
                                                                                                                                                                                                           Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 10
AX334507
LOCUS
DEFINITION
ACCESSION
KEYWORDS
SOURCE
                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                     REFERENCE
AUTHORS
                                           TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                 ORIGIN
                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                   8 8
                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
```

```
Young, P.E., Augustus, M., Carter, K.C., Ebner, R., Endress, G., Horrigan, S., Soppet, D.R. and Weaver, Z. Cancer gene determination and therapeutic screening using signature gene sets WO 0194629-A 5885 13-DEC-2001; Avalon Pharmaceuticals (US) Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 09-JAN-2002
                                                                                                                                                                                                                                                                                                                                                             198
                                                                                                                                                                                                                                                                                      258
                                                                                                                                                                                                                                                                                                             81 ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                      318
                                                                                                                                                                                     138
                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                               80
                                                                                                                                     78
                                                                                                                                                               40
                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                             LysargCysCysCysProaspThrCysGly11eLysCysLeuaspProValaspThrProAsn
                                                                                                                                                                                                                                                                           21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProLysLysSer
                                                                                                                                                                                                                                                                                                                              259 CCAACAAGGAGGAAGCCTGGGAAGTGCCCCAGTGACTTATGGCCCAATGTTTGATGCTTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
 594
0 0
0 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          594
0
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                             Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX335376 5895 from Patent WO0194629.
AX335376
  Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .594
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                              Gaps:
                                                                                      (1-594)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX335376.1 GI:18126095
                                                                                      US-10-613-105-2 (1-132) x AX334507
4.76e-49
762.00
100.00%
100.00%
```

셤 ò ያ ይ

δ

g

ð a ò g

ò g ò 용

```
PAT 14-JUL-2003
                                                                                                                                                                318
                                                                                                                                                                                            199 AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCTGTTGACACCCCCAAAC 258
                                                                                                                                  ProThrArgArgLy8ProGlyLy8Cy8ProValThrTyrGlyGlnCy8LeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Haferlach, T., Schoch, C., Kern, W., Kohlmann, A., Schnittger, S., Dugas, M., Eils, R., Brors, B. and Mergenthaler, S.
Novel genetic markers for leukemias
Novel genetic markers for leukemias
Patent: WO 0303943.* A. 2167 15-MAY-2003;
Deutsches Krebsforschungszentrum (DE);
Ludwig-Maximilian-Univergitaet Muenchen (DE); Haferlach, Torsten, PD Dr. (DE); Schoch, Claudia (DE); Kern, Wolfgang (DE)
Location/Qualifiers
                                           139 ecceaciecerracaracaacaacercacieceacacicacieceacieceacieceaceas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     80
                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                          Ното варјенв
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   78
                                                                                                                                                     LysArgCysCysProAspThrCysGlylleLysCysLeuAspBroValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         139 GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MetlysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19 ArgaAgriccAgcGGCCrtrrccrrrccrrgcrgcrgcrrgccrrggGAAcrcrgGCACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21 TrpAlaValGluGlySerGlyLysSerPheLyaAlaGlyValCyaProProLyaLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            79 redecretedaadecretedaaderecricaaaderedagiererecretaadaaarer
                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                594
132
0 0 0
                                                                                                                                                                                                                                                       121 MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                               ATGTGTGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                 AX780010 594 bp DNA Sequence 2167 from Patent WO03039443. AX780010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-613-105-2 (1-132) x AX780010 (1-594)
                                                                                                                                                                                                                                                                                                                                                                                             AX780010.1 GI:32697004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.76e-49
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
Pred. No.:
                                                                         61
                                                                                                                                     81
                                                                                                                                                                   259
                 41
                                                                                                                                                                                                                                                                                                                   RESULT 13
AX780010
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score:
                                    셤
                                                                        ò
                                                                                              d
                                                                                                                               8 6
                                                                                                                                                                                    ⋧
                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             임
                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08-JAN-2003
                                                                                                                                                                                                139 GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG 198
                                                                                                                                                                                                                                         ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                    318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer 40
                                                                                                                                                   79 TGGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCT 138
                                                                                                                                                                                                                                                                                                                                                                ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                       78
                                                                                                                     04
                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       78
                                                          MetLy8SerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                     TrpAlavalGluGlySerGlyLySSerPheLygAlaGlyValCysProProLygLySser
                                                                                                                                                                                                                                                                                                                                                                                  41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                    CCAACAAGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AridaAGriccAGCGGCCTCTTCCCTGGTGCTGCTTGCCCTGGGAACTCTGGCACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Garcia,T., roman Roman,S., Baron,R., Call,K., Theilhaber,J., Connolly,T., Jackson,A., Bushnell,S.E. and Rawadi,G. Genes involved in osteogenesis, and methods of use Patent: WO 02081745-A 82 17-OCT-2002; Aventis Pharma S.A. (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       594
1132
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                            MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                        414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX577960 594 bp 1
Sequence 82 from Patent WO02081745.
AX577960

    .594
    /organism="Homo sapiens"
    /mol_type="unassigned DNA"
    /db_xref="taxon:9606"

 Gaps:
                             US-10-613-105-2 (1-132) x AX335376 (1-594)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-613-105-2 (1-132) x AX577960 (1-594)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX577960.1 GI:27647168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.76e-49
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores
                                                                                                                                                                                                                                                                                                                                                                                                                                                        379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21
                                                                                                                    21
                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                       199
                                                                                                                                                                                                                                                                                                     81
                                                                                                                                                                                                                                                                                                                                    259
                                                                                                                                                                                                                                                                                                                                                                101
                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 12
AX577960
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score:
```

a

ò

셤

ò

80

318

α

```
PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C12N1/15, C12N1/19, C12N1/21, C12N5/10, C12P21/08, C12Q1/68, G01N33/
                                                                                                                                                                                       81 ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                101 ProproAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysWetGly 120
                                                                                                                                                                                                                                                                                       199 Aagagargricticcrgacacrigiggcarcaaridccrggarccrgrigacaccccaaac 258
79 TGGGCTGTGGAAGGCTCTGGAAAGTCCTTCAAAGCTGGAGTCTGTCCTCCTAAGAAATCT 138
                                                                        139 GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                   BD203743 599 bp DNA linear PAT 17-JUL-20 Human nucleic acid sequence originating in ovarian myoma tissue. BD203743.1 GI:33013513
JP 2002511252-A/84.
Homo sapiens (human)
                                                                                                                                                                                                                          259 ccaacaacaacaaccrccaaagrccccacrcacrtarcccaargrrancrraac
                                                                                                                61 LygArgCygCygProAspThrCygGlyIleLygCygLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      574,
C12N15/00,A61K37/02,C12N5/00
Human nucleic acid sequence originating in ovarian myoma
tissue
                                     41 AlaGlnCyaLeuArgTyrLysLysProGluCyaGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
1. .599
/organism='Homo sapiens (human)'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .599
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-613-105-2 (1-132) x BD203743 (1-599)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.86-49
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bource
                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 15
BD203743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score:
                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                              8
                                                                      유
                                                                                                                                           유
                                                                                                                                                                                                                          유
                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                             8
                             ે
                                                                                                                ò
                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19. ..417
/note="unnamed protein product; precursor ALP"
/note="unnamed protein product; precursor ALP"
/codon grant=1
/protein id="CAA28158.1"
/db_xref="G1:28639"
/db_xref="G0A:P03973"
/db_xref="Swiss-Prot:P03973"
/translation="WKSSGLPPFVULALGTIAPWAVEGSGKSFKAGVCPPKKGAQCL
RYKKPECQSDWQCPGKKRCCPDTCGIKCLDPVDTPNPTRRKPGKCPVTYGQCLMLNPP
                                                                                                                                                                                                                                                    594 bp mRNA linear PRI 21-MAR-1995
Human mRNA for antileukoprotease (ALP) from cervix uterus.
X04470
                                                                        100
                   40
                                                                                                                                                                                                                                                                                                                                                                                Homo gapiens
Makaryotes, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 594)
1 (bases 1 to 594)
1 (bases 1 to 594)
1 (bases 1 to 504)
1 (bases 2 to 504)
1 (bases 2 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (bases 3 to 504)
1 (base
                                                                                                                                                                                                                                                                                                                         X04470.1 GI:28638
antileukoprotease; elastase inhibitor; protease; signal peptide.
Homo sapiens (human)
 ProThrhrgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19. .93
/note="put. signal peptide (aa -25 to -1)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  H. Appelhans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                           ATGTGTGGGAAATCCTGCGTTTCCCCTGTGAAAGCT 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NFCEMDGQCKRDLKCCMGMCGKSCVSPVKA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Data kindly reviewed (05-DEC-1986) by Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .594
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note="pot. polyA signal" 568. .573 /note="pot. polyA signal"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-613-105-2 (1-132) x HSALPR (1-594)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.76e-49
762.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          . . 569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score:
Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mat_peptide
                                                                                                                                                     121
                                                                                                                                                                                         379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21
   81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match:
                                                                                                                                                                                                                                                                  LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE
PUBMED
                                                                                                                                                                                                                                RESULT 14
HSALPR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                 셤
                                                                          ò
                                                                                                        요
                                                                                                                                               ઠે
                                                                                                                                                                                       g
```

ပ္ပ

Oy 41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys 60	Qy 61 LysArgCysCysProAsnThrCysGlylleLysCysLeuAspProValAspThrProAsn 80	. Qy 81 ProthrargargLyBProGlyLyBCyBProValThrTyrGlyGlnCyBLeuMetLeuAen 100 254 CCAACAAGGAGGAAGCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC 313	Qy 101 ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120	Oy 121 MetCysGlyLysSerCysValSerProValLysAla 132 	RESULT 17 BC020708 LOCUS BC020708 COCUS BC020708 DEFINITION Homo sapiens secretory leukocyte protesse inhibitor	z	KEYWORDS MGC. SOURCE Home sapiens (human) SOURCE Almo sapiens ORGANISM Home sapiens Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Home. REFERENCE 1 (bases 1 to 625)	AUTHORS Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G., Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D., Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K., Hopkins, R.F., Jordan, H., Moore, T., Mass, S.I., Mang, J., Hateh, F.,	Stapleton, M., Soares, M.B., Bonaldo, M.F., Cagavant, T., Stapleton, M., Soares, M.B., Bonaldo, M.F., Cagavant, T.B., Scheetz, T.B., Brownstain, M.J., Usdin, T.B., Toshiyuki, S., Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,	Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J., McKernan, K.J., Malek, J.A., Gunatane, P.H., Richards, S., Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W., Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,	Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S., Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y., Bouffard, G.G., Blakeeley, R. W., Touchman, J.W., Green, E.D., Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M.	Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smallus, D.E., Schnerch, A., Schein, J.E., Jones, S.J., and Marra, M.A. Generation and initial analysis of more than 15,000 full-length	numan and mouse cura Bequences JOURNAL Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002) PUBNED 12477932 REFERENCE 2 (bases 1 to 625)	AUTHORS Strausberg, R. TITLE Direct Submission JOURNAL Submitsed (03-JAN-2002) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,	USA REMARK NIH-MGC Project URL: http://mgc.nci.nih.gov COMMENT Contact: MGC help desk Email: cgapbs-r@mail.nih.gov	Tissue Procurement: CLONIECH Laboratories, Inc. CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Sequencing Group at the Stanford Human Genome Canter Stanford University School of Medicine. Stanford. CA 94305
MetlysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro	14 ATGAAGICCAGGGCTCTTCCCCTTCCTGGTGCTTGCCCTGGGAACTCTGGCACCT 73 21 TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer 40 11	AlaGInCysLeuArgTyrLysLysProGluCysGlnSsrAspTrpGlnCysProGlyLys 	roasn aaac	ProThrargarglysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn	01 ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 	121 MetCysGlyLysSerCysValSerProValLysAla 132 	RESULT 16 AXO14898 LOCUS AXO14898 DEFINITION Sequence 97 from Patent W09953040.	AX014898.1 GI:10041165 Homo sapiens (human) Homo sapiens (chaman)	Eukalyota; Metazoa; Lhotuata; Cranata; Vertebrata; buteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. REFERENCE 1 AUTHORS Schmitt,A., Specht,T., Dahl,B., Hinzmann,B., Rosenthal,A. and	Pilarsky, C. TITLE Human nucleic acid sequences from ovarian tumour tissue JOURNAL Patent: WO 9953040-A 97 21-0CT-1999; SCHMITT ARMIN (DE); SPECHT THOMAS (DE); DAHL EDGAR (DE); HINZMANN	BERND (DE); ROSENTHAL ANDRE (DE); METAGEN GES FUER GENOMFORSCHUN (DE); PILARSKY CHRISTIAN (DE) S Location/Qualifiers urce 1. :599	/organism="homo sapiens" /mol_type="unassigned DNA" /db_xref="taxon:9606"	Length:	13 tive: 0 es: 0	-613-105-2 (1-132) x AX014898 (1-599) 1 MetLyeSerSerGerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro 20	14 ATGAAGTCCAGCGCCTCTTCCCTTCCTGGTTGCCTGGGAACTCTGGCACCT 73 21 TrpalaValGluGlygSerGlyLygSerPhelygAlaGlyValCysProProLygLygSer 40

```
PAT 23-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 09-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      249 AAGAGATGTTGTCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81 ProThrhrgArgly8ProGlyLy8Cy8ProValThrTyrGlyGlnCy8LeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      80
                                                                                                                                                                                                                                                                                         Craniata, Vertebrata; Euteleostomi;
Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   189 GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 LysargCysCysProAspThrCysGly11eLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             309 CCAACAAGGAGGAGGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     69 Argaagrecagegecrerrecerrecresesers and a second seasons of the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             41 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                           Genes, compositions, kits, and method for identification, assessment, prevention, and therapy of ovarian cancer patent: WO 0170979-A 20587 27-SEP-2001; Millennium Pharmaceuticals, Inc. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1084
132
0
0
0
                           417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mRNA
                                                                                                                      CQ413516
Sequence 20587 from Patent W00170979.
CQ411516
CQ413516.1 GI:41321297
Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .1084
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX772818 605 bp
Sequence 15 from Patent W003046180.
AX772818 1 GI:32485045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-613-105-2 (1-132) x CQ413516 (1-1084)
                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8.74e-49
762.00
100.00%
100.00%
                                                                                                                                                                                                                                          Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                              Lee, J. and Lillie, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                             382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local S:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                  KEYWORDS
SOURCE
ORGANISM
                                                                                                                      LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No.:
                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 19
AX772818
LOCUS
                                                                       RESULT 18
CQ413516
                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score:
                             음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       පු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             fprotein_id="AAH20708.1"
| Ab xref="cd:18088405" |
| Ab xref="cd:18088405" |
| Ab xref="LocustD:6590" |
| Ab xref="LocustD:6590" |
| Ab xref="LocustD:6590" |
| Ab xref="MKSGEPPLVLIALGTLAPWAVEGSGKSFKAGVCPPKKSAQCL |
| RYKRECQSDWQCPRKRCCPDTCGIRCLDPVDTPNPTRRKPGKCPVTYGQCLMLNPP |
| NFCEMDGQCKRDLKCCMGMCGKSCVSPVKA" |
                                                                            found
                                                                       Clone distribution: MGC clone distribution information can be found through the I.M.A.G.B. Consortium/LLNL at: http://image.llnl.gov Series: IRAL Plate: 37 Row: i Column: 13
This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 15834622. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCAACAAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGly 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGAGATGTTGTCCTGACACTTGTGGCATCAAATGCCTGGATCCTGTTGACACCCCAAAC 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCCCCCAATTICTGTGAGGTGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGC 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             142 GCCCAGTGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAG 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81
       M., Schmutz, J., Grimwood, J., Rodriquez, A., and Myers,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TrpAlaValGluGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LysArgCysCysProAspThrCysGly1leLysCysLeuAspProValAspThrProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  rédécrérédeaadécrérédaaagrécricaaagérideagrérierecreradaaarer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note="synonyms: HUSI, WAP4, WFDC4, ALK1, ALP, BLPI,
HUSI-I"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /gene="SLPI"
/codon_start=1
/product="secretory leukocyte protease inhibitor,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        625
132
0
0
                                                                                                                                                                                                                                /organism="Homo sapiens"
/mol_type="mRNA"
/db_xrefe_taxon:9606"
/clone="MGC:22479 IMAGE:4733996"
/tissue_type="Liver"
/clone_lib="NHMGC" 76"
/lab_host="DHNGB"
/note="Vector: pDNR-LIB"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /db_xref="LocusID:6590"
/db_xref="MIM:107285"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-613-105-2 (1-132) x BC020708 (1-625)
                                                                                                                                                                                                                                                                                                                                                                                                                            1. .625
/gene="SLPI"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5.01e-49
762.00
100.00$
100.00$
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              precursor"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .420
                                                                                                                                                                                                                    1. .625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
Query Match:
DB:
    Dickson, P. R. M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ..
90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CDS
                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score:
```

ద ઠે g

ò

g

ò

셤

ò

ઠે

유

g

ò

ò

of

```
1299 AAGAAGAGATGTTGTCCAGACACTTGTGGTATCAAGTGTCTAGACCCAGTTGACACCCCA 1358
                                                                                                                                                                                                                                                                                                                                                                                                               1179 AACCCAACTCAGAAGATGTCCGGAAAGTCTTTCAAGGCCGGTGTTTGTCCACCAAGAAG 1238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1419 AACCCACCAAACTTCTGTGAAATGGACGGTCAATGTAAGAGAGACTTGAAGTGTTGTATG 1478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100 AsnProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysRet 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Barr, P.J., Gibson, H.L. and Pemberton, P.
Multifunctional protease inhibitors and their use in treatment of disease
Patent: WO 0250287-A 3 27-JUN-2002;
Arriva Pharmaceuticals, Inc. (US)
Location/Qualifiers
1. .321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
           Craniata; Vertebrata; Euteleostomi;
Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                               80 AsnProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                     40 SerAlaGlnCysLeuArgTyrLysLysByroGluCysGlnSerAspTrpGlnCysByroGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LysLysArgCysCysProAspThrCysGly11eLysCysLeuAspProValAspThrPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             their use in treatment
                                                                                                                                                                                                                                                                                                                                                                                              20 ProTrpAlaValGluGlySerGlYLYSSerPheLyBAlaGlyValCySProProLyBLyB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                         1525
112
5
9
7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                Barr, P.J., Gibson, H.L. and Pemberton, P. Multifunctional protease inhibitors and disease described by the MO 0250287-A 15 27-JUN-2002; Arriva Pharmaceuticals, Inc. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                               1. .1525
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX670643 321 bp
Sequence 3 from Patent W00250287.
AX670643
AX670643.1 GI:29292045
                                                                                                                                                                                                                                                                                            Gaps:
                                                                                                                                                                                                                                                                                                                      US-10-613-105-2 (1-132) x AX670655 (1-1525)
Homo sapiens
Eukaryota, Metazoa, Chordata,
Mammalia, Eutheria, Primates;
                                                                                                                                                                                                                        2.64e-39
638.50
87.97%
84.21%
83.79%
                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                             Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 21
AX670643
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
 ORGANISM
                                     REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                   PEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PEATURES
                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                         Score:
                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                          Location/Qualifiers

Location/Qualifiers

1. 605

/organism="Homo sapiens"
/mol type="mcNa"
/bo faref="taxon:9606"

1. 21

22. 363

/note="unnamed protein product"
/codon start=1
/proteIn id="CAE06258.1"
/db_xref="draft=3185046"
/translation="MKSGGEIPPPTVULALGTLAPWAVEGSGKSFKAGVCPPKKSAQCL
RYKKPECQSDWQCPGKKRCCPDTCGIKCLDPVDTPNPTRRKPGKCPVTYGQCLMLNPP
NFCEMDOGCVT"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 26-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsn 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCAACAAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAAC 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81
            Craniata, Vertebrata, Euteleostomi,
Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22 Argaagrecagegeererrecerrecregagererrecerregaaacrergecacer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                           605
129
2
1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MetCysGlyLysSerCysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
                                                Bejanin, S. and Tanaka, H. Human cDNAs and proteins and uses thereof Patent: WO 03046180-A 15 05-JUN-2003; Genset S.A. (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX670655 1525 bp
Sequence 15 from Patent W00250287.
AX670655 AX670655.1 GI:29292050
                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-613-105-2 (1-132) x AX772818 (1-605)
            Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                          6.62e-46
720.50
97.73%
97.73%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
Homo sapiens (human)
 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                      Score:
Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                            3'UTR
polyA_signal
polyA_site
                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          262
                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 20
AX670655
LOCUS
DEFINITION
ACCESSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                           Pred. No.:
ORGANISM
                                                                                                                                                                       5'UTR
CDS
                                     REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                      PEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
```

1418

66

79

PAT 26-MAR-2003

g

ò

ద ઠે

ઠે

g

g à g

ઠે

셤

ò

```
PAT 26-MAR-2003
                                                                                            105
                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GluMetAspGlyGlnCysLysArgAspLeuLysCysRetGlyMetCysGlyLysSer 125
                            120
                                                                      180
                                                                                                                                      125
                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           82
          65
                                                  85
                                                                                                                                                                                                                                                                                          Homo sapiens (human)
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          45
                                                                                                                                                                                                                                                                                                                                                               οŧ
                                                                                                                                     26 SerGlyLyBSerPheLyBalaGlyValCyBProProLyBLyBSerAlaGlnCyBLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   66 AspThrCysGlyIleLysCysLeuAspProValAspThrProAsnProThrArgArgLys
                         61 TACAAAAAACGGGAATGCCAGTCCGACTGGCAGTGCCCGGGTAAAAAACGTTGTTGTCCCG
                                                  66 AspThrCysGly11eLysCysLeuAspProValAspThrProAsnProThrArgArgLys
                                                              TyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLysLysLysArgCysCysPro
                                                                                                                                                                                                                                                                                                                                                                their use in treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1525
107
0
0
0
                                                                                                                                                                                                                                                                                                                                                   Barr, P.J., Gibson, H.L. and Pemberton, P.
Multifunctional protease inhibitors and the
disease
Patent: WO 0250287-A 7 27-JUN-2002;
Arriva Pharmaceuticals, Inc. (US)
Location/Qualifiers
1. 1525
Ce /organism="Home sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                             AX670647 155 bp
Sequence 7 from Patent W00250287.
AX670647 GI:29292047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-613-105-2 (1-132) x AX670647 (1-1525)
                                                                                                                                                                               126 CysValSerProValLysAla 132
                                                                                                                                                                                                     301 rererrreceeeraaaeea 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.85e-39
635.00
100.00%
100.00%
83.33%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                106
           46
                                                                                                                                                                                                                       RESULT 23
AX670647
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORIGIN
                          셤
                                                                  용
                                                                                      ò
                                                                                                             g
                                                                                                                                      8 6
                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          윤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                  Š
                                                                                                                                                                           ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                          02-DEC-1994
                                                                                                                                                                                                                                              ProGlyLygCygProValThrTyrGlyGlnCygLeuMetLeuAsnProProAsnPheCys 105
                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
Unclassified.
Unclassified.
1 (bases 1 to 324)
Bandyopadhyay, P.K., Eisenberg, S.P., Stetler, G.L. and Thompson, R.C.
BRCOMBINATY METHODS FOR PRODUCTION OF SERINE PROTEASE INHIBITORS
AND NA SEQUENCES USPETL FOR SAME
PAREL: WO 8603319-A 1 19-UN-1986;
                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6 SerGlyLyBSerPheLyBAlaGlyValCyBProProLyBLyBSerAlaGlnCyBLeuArg 45
                                                                                                                                                            45
                                                                                                                                                                                9
                                                                                                                                                                                                     65
                                                                                                                                                                                                     181 CCAGGTAAGTGTCCAGTTACTTACGGTCAATGTTTGATGTTGAACCCACCACCACTTCTTGT
                                                                                                                                                                      26 SerGlyLysSerPheLysAlaGlyValCysProProLysLysSerAlaGlnCysLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          324
000
000
000
                                                              321
107
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .324
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                         108404 324 bp
Sequence 1 from Patent WO 8603519.
108404 1 GI:588883
                                                                                                                                       US-10-613-105-2 (1-132) x AX670643 (1-321)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-613-105-2 (1-132) x I08404 (1-324)
                                                                                                                                                                                                                                                                                                                                                                           CysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                        301 TGTGTTTCCCCAGTCAAGGCC 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.01e-39
635.00
100.00%
100.00%
                                                              1e-39
635.00
100.00%
100.00%
83.33%
                                                                                   Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
Pred. No.:
                                                    Alignment Scores:
Pred. No.:
                                                                                                                                                                                ч
                                                                                                                                                                                                                                                                                         98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         56
                                                                                                                                                                                                                                                                                                                                                                             126
                                                                                                        Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                ..
No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
```

ઠ g

셤 ð 셤

```
/codon start=1
/transLtable=11
/protein_id="CAA00742.1"
/db_xref="G1:413349"
/translation="SGKSFKAGVCPPKKSAQCLRYKKPECQSDWQCPGKKRCCPDTCG
/translation="SGKSFKAGVCPPKKSAQCLLNYKKPECQSDWQCPGKKRCCPGTCG
/ktanslation="SGKSFKAGVCPPKKSAQCLLNYKKPGKCPGGKSCVSPVKA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                synthetic construct
synthetic construct
artificial sequences.

1 (bases 1 to 321)
Heinzel-Wieland, R., Ammann, J., Steffens, G.J. and Flohe, L.
Serine protease inhibitor proteins, medicaments containing them,
DNA sequences coding for these proteins and methods for producing
these proteins, medicaments and DNA sequences
Patent: EP 037335-A 28 20-JUN-1990;
Gruenenthal GmbH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26 SerGlyLysSerPhelysAlaGlyValCysProProLysLysSerAlaGlnCysLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 46 TyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLysLysArgCysCysCysPro
                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    321
105
1
0
                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
1. 321
/organism="synthetic construct"
/mol_type="unassigned DNA"
/mol_type="taxon:32630"
1. 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps:
                                                                                   ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-613-105-2 (1-132) x A08106 (1-321)
301 TGCGTTAGCCCGGTTAAGGCT 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               126 CysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301 TGCGTTAGCCCGGTTAAGGCT 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .321
/gene="ALP-240"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /gene="ALP-240"
                                                                    A08106
Synthetic ALP-gene 240.
A08106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8.1e-39
623.00
99.07%
98.13%
81.76%
                                                                                                                                                   A08106.1 GI:413348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
                                                                                                                            ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No.:
                                                                                                                                                                                                                                                                                    AUTHORS
TITLE
                                           RESULT 25
A08106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene
                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26
                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOS
                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT
A08107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       පු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /gene="ALP-242"
1. 321
1. 321
1. 321
1. 432
1. 542
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 start=1
1. 6000 sta
                                                                                                                                                                       PAT 28-JUL-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               86 ProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsnProProAsnPheCys 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
synthetic construct
synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 31)
Heinzel-Wieland, R., Ammann, J., Steffens, G.J. and Flohe, L.
Serine protease inhibitor proteins, medicaments containing them,
DNA sequences coding for these proteins and methods for producing
these proteins, medicaments and DNA sequences
Patent: EP 037335-A 33 20-UUN-1990;
Gruenenthal GmbH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181 CCCGGGAAGTGCCCGGTTACCTACGGTCAGTGCCTGCTGCTGAACCCGCCTAACTTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     66 AspThrCysGlyIleLysCysLeuAspProValAspThrProAsnProThrArgArgLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerGlyLysSerPheLysAlaGlyValCysProProLysLysSerAlaGlnCysLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 AGCGGTAAGTCTTTCAAAGCCGGCGTCTGTCCTCCTAAGAAATCTGCTCAGTGCCTGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          321
106
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. 321
/organism="synthetic construct"
/mol_type="unassigned DNA"
| Daxref="taxon:32630"
| 1. 321
                                                                                                                                                                          DNA
                                                                                                                                                                          ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-613-105-2 (1-132) x A08111 (1-321)
                                                                                      332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CysValSerProValLysAla 132
                                           126 CysValSerProValLysAla 132
                                                                    312 TGTGTTTCCCCAGTCAAGGCC
                                                                                                                                                                                            Synthetic ALP-gene 242. A08111 GI:413358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.69e-39
632.00
100.00%
99.07%
82.94%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match:
DB:
                                                                                                                                                                                            DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bource
                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No.:
                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                              RESULT 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score:
```

ઠે 셤 ઠે g 6 B 6

g ઠે 셤 ò

```
/codon start=1
/transl_table=11
/protein_id="CAA00748.1"
/db_xref="G1:413361"
/translation="SGKSFKAGVCPPKKSAQCLRYKKPECQSDWQCPGKKRCCPDTCG
/translation="SGKSFKAGVCPPKKSAQCLRYKKPECQSDWGCPGKRCCFGSCV
/SPVKA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 28-JUL-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 GACACTITGIGGIATCAAATGCCTGGATCCGGTTGACACCCCGAACCCGGCGTCGTAAA 180
         synthetic construct
synthetic construct
synthetic construct
artificial sequences.

1 (bases 1 to 321)
Heinzel-Wieland, R., Ammann, J., Steffens, G.J. and Flohe, L.
Serine protease inhibitor proteins, medicaments containing them,
DNA sequences coding for these proteins and methods for producing
these proteins, medicaments and DNA sequences
Patent: EP 0373335-A 34 20-JUN-1990;
Gruenenthal GmbH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      66 AspThrCysGlylleLysCysLeuAspProValAspThrProAsnProThrArgArgLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26 SerGlyLysSerPheLysAlaGlyValCysProProLysLysSerAlaGlnCysLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             46 TyrlyslysProGluCysGlnSerAspTrpGlnCysProGlyLysLysArgCysCysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 TACAAGAAACCCGAGTGCCAGTCTGACTGGCAGTGCTCCTGGTAAGAAGCGTTGTTGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      86 ProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsnProProAsnPheCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181 cccesesaagiecccesinacceaasercasicciecrecresisaaccescraactices
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  106 GlumetAspGlyGlnCysLysArgAspLeuLysCysCysMetGlyMetCysGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241 GAGATGGATGGCCAGTGCAAACGAGATCTGAAATGCTGCATGGGTATGTGCGGTAAAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      321
1051
0050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                             /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
1. .321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         321 bp
                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-613-105-2 (1-132) x A08112 (1-321)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                126 CysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301 recerraceceerraager 321
                                                                                                                                                                                                                                                               /gene="ALP-246"
1. .321
                                                                                                                                                                                                                                                                                                /gene="ALP-246"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic ALP-gene 232.
A08108
A08108.1 GI:413352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    synthetic construct
synthetic construct
artificial sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8.1e-39
623.00
99.07%
98.13%
81.76%
                                                                                                                                                                                   1. .321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A08108
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
             SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                        Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No.:
                                                          REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                      gene
                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28
KEYWORDS
                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT
A08108
                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                         /translation="sgksfkAgVCPFkKsAgCLRYKKPECQSDwgCPGKKRCCPDTCG
TKCLDPVDTPNPTRKKPGKCPVTYGQCLLLNPPNFCELDGQCKRDLKCCLGLGGKSCV
SPVKA"
 PAT 28-JUL-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 28-JUL-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                86 ProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsnProProAsnPheCys 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                         aynthetic construct
artificial sequences.

1 (bases 1 to 321)
Heinzel-Wielland, R., Ammann, J., Steffens, G.J. and Flohe, L.
Serine protease inhibitor proteins, medicaments containing them,
DNA sequences coding for these proteins and methods for producing
these proteins, medicaments and DNA sequences
Patent: EP 037335-A 29 20-UUN-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      66 AspThrCysGlyIleLysCysLeuAspProValAspThrProAsnProThrArgArgLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181 CCCGGGAAGTGCCCGGTTACCTACGGTCAGTGCCTGCTGCTGCTGAACCCGCCTAACTTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26 SerGlyLysSerPheLysAlaGlyValCysProProLysLysSerAlaGlnCysLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 AGCGGTAAGTCTTTCAAAGCCGGCGTCTGTCCTTCCTAAGAAATCTGCTCAGTGCCTGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           46 TyrlyslysProGluCysGlnSerAspTrpGlnCysProGlyLysLysArgCysCysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 TACAAGAAACCCGAGTGCCAGTCTGACTGGCAGTGTCCTGGTAAGAAGCGTTGTTGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    321
103
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                          /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
1. .321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
 DNA
                                                                                                                                                                                                                                                                                                                                                                                                          /protein_id="CAA00743.1"
/db_xref="GI:413351"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ďq
ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         321
                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-613-105-2 (1-132) x A08107 (1-321)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           321
                                                                                                                                                                                                                                                                                                                                                           /gene="ALP-231"
/codon_start=1
/transl_table=11
                                                                                                                                                                                                                                                                                                                               /gene="ALP-231"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301 recerrasceceerraaceer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A08112
Synthetic ALP-gene 246.
A08112
A08112.1 GI:413360
              Synthetic ALP-gene 231.
A08107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8.1e-39
623.00
100.00%
96.26%
81.76%
                                             A08107.1 GI:413350
                                                                            synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A08112
LOCUS
DEFINITION
ACCESSION
VERSION
             DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                      source
                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..
9
                                                                                                                                          AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 27
                                                                                                                                                                                                                                                                                                                   gene
                                                                                                                          REFERENCE
                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                               CDS
                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
```

82

65

45 9

```
1. .321

/gene="ALP-237"

/gene="ALP-237"

/dedo state=1

/transl table=11

/protein_id="CAA00746.1"

/db_xref="G1:413357"

/translation="SGKSFKAGVCPPKKSAQCLRYKKPECQSDWQCPGKKRCCPDTCG

/KCLDPVDTPNPTRRKPGKCPVTYGQCLLLNPPNFCELDGQCKRDLKCCLGFCGKSCV

SPVKA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 28-JUL-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121 GACACTIGIGETATCAAATGCCTGGATCCGGTTGACACCCCGAACCCGACGCGTCGTAAA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181 CCCGGGAAGTGCCCGGTTACCTACGGTCAGTGCCTGCTGCTGAACCCGGCTAACTTCTGC 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         synthetic construct
synthetic construct
artificial sequences.

1 (bases 1 to 321)
Heinzel-Wieland, R., Ammann, J., Steffens, G.J. and Flohe, L.
Serine protease inhibitor proteins, medicaments containing them,
DNA sequences coding for these proteins and methods for producing
these proteins, medicaments and DNA sequences
Patent: EP 037335-A 27 20-JUN-1990;
Gruenenthal GmbH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     46 TyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLysLysArgCysCysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsnProProAsnPheCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       66 AspThrCysGlyIleLysCysLeuAspProValAspThrProAsnProThrArgArgLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 TACAAGAAACCCGAGTGCCAGTCTGACTGGCAGTGTCCTGGTAAGAAGCGTTGTTGTCCT
 these proteins, medicaments and DNA sequences Patent: EP 0373335-A 32 20-JUN-1990; Gruenenthal GmbH
                                                                                                                                                                                                                                                                                                                                                                    321
103
1
0
                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                               1. .321
/organism="synthetic construct"
/mol_type="unassigned DNA"
/d_xref="taxon:32630"
1. .321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ďq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             321
                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (1-321)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CysvalSerProvalLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         321
                                                                                                                                                  /gene="ALP-237"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301 recerraceceerraaecr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A08105
Synthetic ALP-gene 230.
A08105
                                                                                                                                                                                                                                                                                                                                                                    1.15e-38
621.00
99.07%
96.26%
81.50%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-613-105-2 (1-132) x A08110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A08105.1 GI:413346
                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            126
                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                     source
                                                                                                                                                                                                                                                                                                                                                                    Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 30
A08105
                                                                                                                                     gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                  CDS
                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                     ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                   /transT_table=11
/protein_id="CAA00744.1"
/db_xref="G1:413353"
/translation="SGKSFKAGVCPPKKSAQCLRYKKPECQSDWQCPGKKRCCPDTCG
/kranslation="SGKSFKAGVCPPKKSAQCILIANPNFCELDGQCKRDLKCCLGLGGKSCV
SPVKA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 28-JUL-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlumetAspGlyGlnCysLysArgAspLeuLysCysCysMetGlyMetCysGlyLysSer 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCCGGGAAGTGCCCGGTTACCTACGGTCAGTGCATCCTGCTGAACCCGCCTAACTTCTGC 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121 GACACTTGTGTATCAAATGCCTGGATCCGGTTGACACCCCGAACCCGACGCGTCGTAAA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsnProProAsnPheCys 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 321)
Heinzel-Wieland, R., Ammann, J., Steffens, G.J. and Flohe, L.
Serine protease inhibitor proteins, medicaments containing them,
DNA sequences coding for these proteins and methods for producing
1 (bases 1 to 321)
Heinzel, Wielland, R., Ammann, J., Steffens, G.J. and Flohe, L.
Serine protease inhibitor proteins, medicaments containing them,
DNA sequences coding for these proteins and methods for producing
these proteins, medicaments and DNA sequences
Patent: For 0373335-A 30 20-JUN-1990;
Gruenenthal GmDH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AspThrCysGlyIleLysCysLeuAspProValAspThrProAsnProThrArgArgLys 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerGlyLysSerPheLysAlaGlyValCysProProLysLysSerAlaGlnCysLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1yrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLysLysArgCysCysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TACAAGAAACCCGAGTGCCAGTCTGACTGGCAGTGTCCTGGTAAGAAGCGTTGTTGTTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGCGGTAAGTCTTTCAAAGCCGGCGTCTGTCCTCTAAGAAATCTGCTCAGTGCCTGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                     321
102
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                               /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
1. .321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             đq
                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-613-105-2 (1-132) x A08108 (1-321)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CysvalSerProvalLysAla 132
                                                                                                                                                                                                      1. .321
/gene="ALP-232"
1. .321
/gene="ALP-232"
                                                                                                                                                                                                                                                                 /codon_start=1/transl_table=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A08110
Synthetic ALP-gene 237,
A08110
                                                                                                                                                                                                                                                                                                                                                                                                                                    1.15e-38
621.00
100.00%
95.33%
81.50%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A08110.1 GI:413356
                                                                                                                                 1. .321
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
TITLE
                                                                                                                                                                                                      gene
                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 29
                                                                                                                                                                                                                                  CDS
                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                     DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A08110
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
```

g

8

g 8 g ò g ઠે 셤 ઠે

ઠે

105

120

85

65

```
/codon start=1
/codon start=1
/transl table=11
/protein_id="Cah00745.1"
/db_xref="G1:413355"
/db_xref="G1:413355"
/translation="SGKSFKAGVCPPKKSAQCLRYKKPECQSDWQCPGKKRCCPDTCG
/kranslation="SGKSFKAGVCPPKKSAQCLRYKKPECQSDWQCPGKKRCCFGCGKSCV
SPVKA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HSSLIPG 2657 bp DNA linear PRI 30-MAR-1995
Human SLPI gene for secretory leukocyte protease inhibitor.
X04502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryottan Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. I, Dases 1 to 2657)
Steeler, G., Brewer, M.T. and Thompson, R.C.
Isolation and sequence of a human gene encoding a potent inhibitor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  86 ProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsnProProAsnPheCys 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 gacactricrecratcaaargccrecarcecrreacacccceaaccccaccerceraaa 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       85
                                                                                                                                                                                                                                                                                                                                                                45
                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                         65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rogaev, E. I., Keryanov, S. A. and Malyako, Y. K. Dinucleotide repeat polymorphisms at the Pl, HBE1 and MYH7 loci Hum. Mol. Genet. 1 (4), 285 (1992) 33265040 1363870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  106 GlumetAspGlyGlnCysLysAspLeuLysCysCysRCysMetClyMetCysGlyLysSer
                                                                                                                                                                                                                                                                                                                                                             SerGlyLysSerPheLysAlaGlyValCysProProLysLysSerAlaGlnCysLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                           46 TyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLysLysRysArgCysCysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 racaagaaacccgagreccagrergacregeagrerecregraagaagegrrerrerer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AspThrCysGlylleLysCysLeuAspProValAspThrProAsnProThrArgArgLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181 CCCGGGAAGTGCCCGGTTACCGAAGGTCAGTGCCTGCTGCTGAACCCGCCTAACTTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241 GAGCTCGATGGCCAGTGCAAACGAGATCTGAAATGCTGCCTGGGTCTGTGCGGTAAAAGC
                                                                                                                                                                                                                                                                                                                                                                                             1 AGCGGTAAGTCTTTCAAAGCCGGCGTCTGTCCTCTAAGAAATCTGCTCAGTGCCTGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       X04502.1 GI:36485
elastase inhibitor; protease inhibitor; secretory leucocyte
protease inhibitor; trypsin inhibitor.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                   321
102
4
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   of leukocyte proteases
Nucleic Acids Res. 14 (20), 7883-7896 (1986)
                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                   Gaps:
                                                                                                                                                                                                                                                                                                                               x A08109 (1-321)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 126 CysvalSerProvalLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301 TGCGTTAGCCCGGTTAAGGCT 321
                                l. .321
/gene="ALP-236"
1. .321
/gene="ALP-236"
                                                                                                                                                                                                                 3.88e-38
614.00
99.07%
95.33%
80.58%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (bases 1 to 2657)
                                                                                                                                                                                                                                                                                                                                 US-10-613-105-2 (1-132)
                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   87040761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3640338
                                                                                                                                                                                                         Scores:
                                                                                                                                                                                                                                                                                                                                                                26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
ORGANISM
                                                                                                                                                                                                       Alignment S
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 32
HSSLIPG
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
JOURNAL
MEDLINE
PUBMED
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
MEDLINE
PUBMED
gene
                             CDS
                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                        Score:
                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ठे
                                                                                                                                                      /protein_id="CAA00741.1"
/db_xref="G1:413347"
/translation="SGKSFKAGVCPPKKSAQCLRYKKPECQSDWQCPGKKRCCPDTCG
IKCLDPVDTPNPTRRKPGKCPVTYGQCLLLNRPNFCELDGGCKRDLKCCLGLGGKSCV
SPYKA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 28-JUL-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ProGlyLysCyaProValThrTyrGlyGlnCysLeuMetLeuAsnProProAsnPheCys 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121 GACACTTGTGGTATCAAATGCCTGGATCCGGTTGACACCCCGAACCCGACGCGTCGTAAA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cccededadereccederraceracedredereccreerecreareaceceraacriciec 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGlyMetCysGlyLysSer 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241 GAGCTCGATGGCCAGTGCAAACGAGATCTGAAATGCTGCGGTCTGTGCGGTAAAAGC 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 321)
Heinzel-Wielland, R., Ammann, J., Steffens, G.J. and Flohe, L.
Serine protease inhibitor proteins, medicaments containing them,
DNA sequences coding for these proteins and methods for producing
these proteins, medicaments and DNA sequences
Patent: EP 037335-A 31 20-JUN-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLysLysArgCysCysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AspThrCysGlyIleLysCysLeuAspProValAspThrProAsnProThrArghys
                                                                                                                                                                                                                                                                                                                                                                                                                            SerGlyLyBSerPheLyBAlaGlyValCyBProProLyBLyBSerAlaGlnCyBLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                             61 racaagaaacccgagrgccagrcrgacrgccagrgrccrggraagaagcgrrgrgrccr
                                                                                                                                                                                                                                                                                   321
102
1
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"

    .321
    /organism="synthetic construct"
|mol_type="unassigned DNA"
|db_xref="taxon:32630"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                               (1-321)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CysValSerProValLysAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301 recerrascecestraaseer 321
                                                                                                        /gene="ALP-230"
/codon_start=1
/transl_table=11
                                                                   l. .321
/gene="ALP-230"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A08109
Synthetic ALP-gene 236.
A08109
                                                                                                                                                                                                                                                                                                                                                                                               x A08105
                                                                                                                                                                                                                                                                                    88e-38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A08109.1 GI:413354
                                                                                                                                                                                                                                                                                                  614.00
99.07%
95.33%
80.58%
                                                                                           1, .321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .321
                                                                 .321
                                                                                                                                                                                                                                                                                                                                                                                               US-10-613-105-2 (1-132)
                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                      Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 31
A08109
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                    Alignment (
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
                                                                 gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                           CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                     Score:
                                                                                                                                                                                                                                       DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
```

Oy 58 ProGlyLysBLyBArgCy8Cy8ProAspThrCy8GlyIleLy8Cy8LeuAspProValAsp 77	Qy 78 ThrProAsnProThr	Oy 82 82	1298 ATTAGAGGGACGGAACTGGGTGATGGGTCCTGCCAGGCCTCCTTGTCAATGCCGTAGTGA	Qy 82 82 1358 GTCACAGTGCCCTAAGAAGTAGCCAGCTGGTGAAGCAGCGGGCATTTAGATAGCCAGG 1417	Ογ 82 θ2	Db 1418 TAGTTGGAAGCCTCCCACCTAGTCAGCACTGGGCGGCTGGCACCTGCATAATGGGGGGCC 1477 Qy 82	Db 1478 TGAAGTTCTAGGAGCCAGGTGCTATGTTTGGGGGCCGCCTTAGGGAGAAGGTGGTGGT 1537	Qy 82 82	1538 GATAGAGGTGGGGAGGGATGATCCCCCTGCTGAAGCTGGACGAGGGGCTCACTCTAAA	82	Db 1598 AAGTGGGGATGGGAGGGTTGTATAAAGTACAAGGCCTCTGACCGGTAGCCTCACTCTCA 1657	Qy 83ArgargLysProGlyLysCysProValThrTyrGlyGlnCysLeuMet 98	1030 CCCARCCCARCARGARGARGARGARGARGARGARGARGARGARGARGARGA	1718 CTTAACCCCCCAATTTCTGTGAGATGGCCAGTGCCAGTGCAAGCGTGACTTGAAGTGTTGC	Qy 119 MetGlyMetCysGlyLysSerCysValSerProValLys 131 	RESULT 33	IO1501 LOCUS IO1501 498 bp 88-DNA linear PAT 21-MAY-1993	DEFINITION Sequence 2 from Patent US 4845076. ACCESSION 101501. VERSION 101501.1 G1:270157	S ISW CE RS	TITLE DNA sequences coding for proteins having the biological activity of HUSI-type I inhibitors, biotechnological methods for the preparation of said proteins and pharmaceutical compositions	containing said proteins JOURNAL Patent: US 4845076-A 2 04-JUL-1989; Grunenthal GmbH;;	FEATURES Location/Qualifiers source 1498	/organisme="unknown" /mol_type="unassigned DNA" ORIGIN	Alignment Scores: 9.86e-33 Length: 498
;	promoter 181184 /note="put. CAAT-box" promoter 242247 /note="put. TATA-box"	precureor_RNA 2762574 primary transcript of SLPI" primary t		/codon_start=1 /product="secretory leukocyte protease inhibitor (SLPI)" /protein_id="CAA28187.1"	/db_xref="G1:758101" /db_xref="G6A:P0333" /db_wref="G0A:P0333"	/ dd. xret="Swles-Prof: P039'13" / translat inn="MKSQELPFLVULLGTLAPWAVEGSGKSFKAGVCPPKKSAQCL RYKKPECQSDWQCPGKKRCCPDFGTKCLDPVDTPNPTRRKFGKCPVTYGQCLMLNPP NFCEMDGQCKRDLKCCMGMCGKSCVSPVKA"		mar_peptide Join(1866 1877, 1886)	gene join(366. 375,1092. 1250,1668. 1817,2397. 2398) /gene="SLPI"	intron 3761091 /gene="SLPI"	/note="intron I"	Ę	102101 1231 1200/ Jane	MRNA 1667131 /gene="SLPI"	/noce="exon 3" intron 1818. 2396 /genealfilm /noce="intron III"	mRNA 23972574 /note="exon 4"	misc_feature 25492554 // // // // // // // // // // // // //	polyA_site 2574	ent Scores: No.: 547.00 Conservative: 42.49\$ Conservative: Mismatches: 7.1.20\$	9 9 05-2 (1-132) x HSSLIPG (1-26	Oy 5 GlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeu	Db 998 GGTCTCTCCCCCTCAAAAGTGGTGCTTTGTTCAGGAGGCATGATGGTCCTCAGTACCCA 1057 Qy 19AlaProTrpAlaValGluGlySerGlyLygSerPheLygAlaGlyValCygProPro 37	Db 1058 GCCTCCTCCTACCTTTCTCTTCAAAAGCCTTCAAAGCTGGAGTCTGTCCTTCTTT117	Qy 38 LysLysSerAlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCys 57 [

g

ઠે g ે g

원

δ

ठ

```
as compressions and repeats; all regions were covered by at least one plasmid subclone or more than one M13 subclone; and the assembly was confirmed by restriction digest. RP1-300I2 is from the library RPCI-1 constructed by the group of Pieter de Jong. For further details see http://www.chori.org/bacpac/home.htm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6104. .6223 — formatches 174. .298 of consensus" /note="AluSg/x repeat: matches 174. .298 of consensus" 809. .8022 /note="Charlie2 repeat: matches 3505. .3724 of consensus" 8057. .8416 /note="MERS2C repeat: matches 894. .1278 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /notes"L1M3e repeat: matches -477. .-184 of consensus"
12038. .12289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2035. .2766 // Anote="LiM4 repeat: matches 4215. .4986 of consensus" 2764. .3024 // Additional matches 1740. .1979 of consensus" 3025. .3316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .5225 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1939. .2038
/note="LIM4 repeat: matches 5628. .5728 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3317. .4149
/noce="LiM4c repeat: matches 802. .1740 of consensus"
join (5928. 593),6243. .6400)
gene="dJ30012.1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .2572 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note="L1M3e repeat: matches -125. .225 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .1574 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8417, .9408
/note="L1 repeat: matches 2125. .3119 of consensus"
3340. .10314
/note=="L1A" repeat: matches 1213. .2572 of consensus
10328. .10905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  'note="MER1B repeat: matches 65. .337 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                975. 1059
/note="MIR repeat: matches 110. 197 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          'note="AluSg repeat: matches 1. .293 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="AluSx repeat: matches 1. .310 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    product="dJ30012.1 (putative novel transcript)"
/note="match: ESTs: Em:Al222267"
/evidence=not_experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1143. .1674
/note="L1ME3 repeat: matches 5592. .6164 of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               253. .556
/note="7_6_copies 4 mer aaga 66% conserved"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                οĘ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12290. .12648
/note="LiM1 repeat: matches 1207.
complement (12725. .13141)
/note="match: GSS: Em:AQ760198"
13052. .13153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1641. .1934
/note="L1M4 repeat: matches 4935.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                complement (11008. .11364)
/note="match: GSS: Em:AQ492607"
11229. .11533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note="match: GSS: Em:AQ081155"
13218. .13397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          'note="MIR repeat: matches 33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       oin(5925. .5993,6243. .>6400)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aa
                                                                                                                                                                                                                                                                                                                                                          /map="q12-13.12"
/clone="RP1-30012"
/clone lib="RPCI-1"
251. .554
/note="152 copies 2 mer ac
                                                                                                                                                                                                                                                      /organism="Homo sapiens"
                                                                                                                                                                                                                                                                              /mol_type="genomic_DN
/db_xref="taxon:9606"
/chromosome="20"
                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13131. .13392
                                                                                                                                                                                                                              . .63796
                                                                                                                                                                                                                                                                                                                                                                                                                                              repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Natect Submission

Submitted (29-MAR-2001) Sanger Centre, Hinxton, Cambridgeshire, CBIO 18A, UK. E-mail enquiries: humquery@sanger.ac.uk Clone
requestes clonerequest@sanger.ac.uk

On Nov 29, 2000 this sequence version replaced gi:1019630.

During sequence assembly data is compared from overlapping clones. Where differences are found these are annotated as variations together with a note of the overlapping clone name. Note that the variation annotation may not be found in the sequence submission corresponding to the overlapping clone, as we submit sequences with only a small overlap as described above.

The following abbreviations are used to associate primary accession numbers given in the feature table with their source databases:

Emi; EMBL; Sw.; SWISSPROT; Tr.; TREMBL; Wo.; WORMPEP; Information on the WORMPEP database can be found at http://www.sanger.ac.uk/Projects/C_elegans/wormpep This sequence thrush from an the form part of bacterial clone contigs of human chromosome 20, constructed by the Sanger Centre Chromosome 20 human chromosome 20, constructed by the Sanger Centre Chromosome 20 human chromosome 20, constructed by the Sanger Centre Chromosome 20 human chromosome 20 human chromosome 20 human chromosome 20 human chromosome 20 human chromosome 20 ronstructed by the Sanger Centre Chromosome 20 recept for a 100 base overlapping sections only once, except for a 100 base overlapp.

The true right end of clone RPI-172H20 is at 100 in this sequence. The true right end of clone RPI-172H20 is at 100 in this sequence. This sequence was finished as follows unless otherwise noted: all regions were either double-stranded or sequenced with an alternate chemistry or covered by high quality data (1.e., phred quality >= 30); an attempt was made to resolve all sequencing problems, such
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HS30012 13near PRI 07-APR-2001 Human DNA sequence from clone RP1-30012 on chromosome 20q12-13.12 Contains ESTs, GSSs and STSs. Contains part of a novel gene and the SIPI gene for secretory leukocyte protease inhibitor
                                                                                                                                                                                                                                                                                                                                                                                                                                         83 ArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMetLeuAsnProPro 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                103 AsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCysMetGlyMetCys 122
                                                                                                                                                                                                                                                                                                                                                                                           144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      264
                                                                                                                                                                                                                                                                                                                                       82
                                                                                                                                                                                                                                   62
                                                                                                                                                                                                                                                                                    84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 63796)
                                                                                                                                                                                                                                                                                                                                                                  25 TGCCTTAGATACAAGAAACCTGAGTGCCAGAGTGACTGGCAGTGTCCAGGGAAGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            145 AGGAGGAAGCCTGGGAAGTGCCCAGTGACTTATGGCCAATGTTTGATGCTTAACCCCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             205 AATTTCTGTGAGATGGATGGCCAGTGCAAGCGTGACTTGAAGTGTTGCATGGGCCATGTGT
                                                                                                                                                                                                                                CysLeuArgTyrLysLysLysProGluCysGlnSerAspTrpGlnCysProGlyLysLysArg
                                                                                                                                                                                                                                                                                                                                       CysCysProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsnProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AL035660
AL035660.16 GI:111418457
AL03:610.11eukoproteinase; proteinase inhibitor; SLPI.
Homo sapiens (human)
                        80000
                                              Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (antileukoproteinase), complete sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GlyLyBSerCyBValSerProValLyBAla 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  265 GGGAAATCCTGCGTTTCCCCTGTGAAAGCT 294
                        Matches:
                                                                                                    Indel8:
                                                                                                                                                                             US-10-613-105-2 (1-132) x I01501 (1-498)
                  545.00
100.00%
100.00%
71.52%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                              Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ramsay, H
                                                                                                                                                                                                                                                                                                                                       63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       123
                                                                                                 Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 34
HS300I2/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
```

```
/codon_start=1
/podduct==secretory leukocyte protease inhibitor"
/product==secretory leukocyte protease inhibitor"
/protein_id==AAD51758.1"
/db_xref="d1:5802680"
/db_xref="d1:5802680"
/kranalation="MKSGAEPELMVLLALGVLAPWSVEGGKUNDAIKIGACPARKPAQC
ikterpecgTDWECPEKQRCCODTGFRCINPVPIRGPVKKKFGRCVKFQGKCLMLNP
PNKCQNDGQCDGKYKCCEGMCGKVCLPPV"
                                                                                                                                                                               AF178426
Rattus norvegicus secretory leukocyte protease inhibitor mRNA,
                                                                                                                                                                                                                                                                                                                                                              Rattus.
1 (bases 1 to 490)
Song, X., Zeng, L., Jin, W., Thompson, J., Mizel, D.E., Lei, K.,
Song, X., Zeng, L., Jin, W., Thompson, J., Mizel, D.E., Lei, K.,
Selllinghurst, R.C., Poole, A.R. and Wahl, S.M.
Secretory leukocyte protease inhibitor suppresses the inflammation and joint damage of bacterial cell wall-induced arthritis
J. Exp. Med. 190 (4), S35-542 (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 (bases 1 to 490)
Song,X.-y. and Zeng,L.
Song,X.-y. and Zeng,L.
Submitseion
Submitted (17-AUG-1999) Oral infection & Immunity Branch, National Institute of Dental & Craniofacial research, 9000 Rockville Pike, Bethesda, MD 20892
Location/Qualifiers
                        304 CTGCAAGACAGACAGCCAGTGCCTGGGTGACTTAAAATGCTGCAAGAGCATGTGCGGGAA 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              69 TGGAGTGTGGAAGGA---GGCAAAAATGATGCTATCAAAATTGGAGCCTGCCTGCTAGA 125
eCysGluMetAspGlyGlnCysLysAxgAspLeuLysCysCysMetGlyMetCysGlyLy 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21 TrpAlaValGluGlySerGlyLys-----SerPheLysAlaGlyValCysProProLys 38
                                                                                                                                                                                                                                                                                          Rattus norvegicus (Norway rat)
Rattus norvegicus
Eukaryota, Metazoa; Chordara; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LysSerAlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9 ATGAAGTCCTGCGGCCTGTTCCTCTAGTGCTGCTTCCTTGCTCTGGGTGTACTGGCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   490
833
30
230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .490
/organism="Rattus norvegicus"
/mol_type="mRNA"
/strain="Lewis"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps:
                                                                         132
                                                                                            364 AGTCTGCCTCACCCTGTGAAAGCC 388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /db_xref="taxon:10116"
9. .404
/note="81pi"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 x AF178426 (1-490)
                                                                         124 sSerCysValSerProValLysAla
                                                                                                                                                                                                                   complete cds.
AF178426
AF178426.1 GI:5802679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5.11e-28
482.50
75.00%
62.88%
63.32%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-613-105-2 (1-132)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10449524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
Pred. No.:
 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match:
DB:
                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                  DEFINITION
                                                                                                                                               RESULT 36
AF178426
                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score:
                              셤
                                                                       ò
                                                                                                           용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /trānslation="MAPWAVEGAENALKGGACPPRKIVQCLRYEKPKCTSDWQCPDKK
KCCRDTCAIKCLNPVAITNPVKVKPGKCPVVYGQCMMLNPPNHCKTDSQCLGDLKCCK
                                     07-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGTGCTGAAAATGCTTTGAAAGGGGGAGCCTGCCTAGAAAAATTGTCCAGTGCCT 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            184 CCGAGATACTTGCGCAATCAAATGCCTGAACCCTGTTGCTATCACGAACCCAGTTAAGGT 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCCTCTTGCCCTTC---GTGCTTCTTGCCCTGGGAATCCATGGCACCTTGGGCCGTGGA 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24 uGlySerGlyLysSerPheLysAlaGlyValCysProProLysLysSerAlaGlnCysLe 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BProAspThrCysGlyIleLysCysLeuAspProValAspThrProAsnProThrArgAr 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24
                                                                                                                                                              Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Cetartiodactyla, Suina, Suidae, Sus.
                                                                                                                                                                                                                                                                                                                                               source text: Porcine uterus. cDNA to mRNA, clone pALP.
Location/Qualifiers
1. .600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                44 uArgTyrLysLysProGluCysGlnSerAspTrpGlnCysProGlyLysLysArgCysCy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GlyLeuPheProPheLeuValLeuLeuAlaLeuGly-ThrLeuAlaProTrpAlaValGl
                                                                                                                                                                                                               Farmer, S.J., Flass, A. B. and Simmen, R.C.
Complementary DNA cloning and regulation of expression of the
messenger RNA encoding a pregnancy-associated porcine uterine
protein related to human antileukoproteinase
MND1. Endocrinol. 4 (8), 1095-1104 (1990)
                                     MAM
                      600 bp mRNA linear
M57446
M57446 GI:164319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     600
87
126
1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /product="antileukoproteinase"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /protein_id="AAA63446.1"
/db_xref="G1:164320"
                                                                                                                                                                                                                                                                                                                                                                                                  organiam="Sus scrofa"
/mol_type="mRNA"
/db_xref="taxon:9823"
/clone="pALP"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /tissue_type="uterus"
1. .600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-613-105-2 (1-132) x PIGALP (1-600)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SMCGKVCLTPVKA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       'codon start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /sex="female"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     6.816-30
508.50
78.29%
67.44%
                                                                                                         antileukoproteinase.
Sus scrofa (pig)
Sus scrofa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gene="ALP"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene="ALP"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              600
/gene="ALP"
                                                                                                                                                                                                  1 (bases 1 to 600)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   44. .391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity:
                                                                                                                                                                                                                                                                                                                                                 Original
                                                                                                                                                                                                                                                                                                                          2293019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                polyA_site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match:
DB:
                                 LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ..
No...
RESULT 35
PIGALP
                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                       JOURNAL
MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CDS
                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                               COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
```

셤

ሯ

g

ò

a ò 유 ઠે

ò

28

```
fprocein_id="AaN32722.1"
| Abrocein_id="AaN32722.1"
| Area id="G1:2345126.1"
| translation:2345126.1"
| translation:2345126.1"
| translation:245126.1"
| translation:245126.1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AF421377 680 bp mRNA linear ROD 02-OCT-2002 Rattus norvegicus secretory leukocyte protesse inhibitor precursor,
                                                                                                                                                                                                                                                                          250 CGTGGACCAGTG---AAGAAGCCTGGGAGGTGCCTCAAATTTCAAGGAAAATGTCTGATG 306
                                                                                                                                                                                                                                                                                                                                                                                                                      99 LeuAsnProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCys 118
                                                                                                                                                                                                                                                                                                                                                                                                                                        72
                                                                                                                                     38
                                                                                                                                                                                                                                                                                                                                               98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Secretory Leukocyte Protease Inhibitor (SLPI) Upregulation in Cerebral Stroke: Expression of SLPI Protects Brain from Ischemic
                                                                                   13 ATGAAGTCCAGCGGCCTGTTCCCTCTCATGGTGCTCCTTGCTCTGGGTGTCCTGGGACCCC
                                                                                                                                     21 TrpAlaValGluGlySerGlyLvg-----SerPheLygAlaGlyValCygProProLyg
                                                                   1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                      LysSeralaGinCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysPro
                                                                                                                                                                                                                                                                                                                                                 79 ProAsnProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wang,X., Li,X., Xu,L., Zhan,Y., Yaish-Ohad,S., Barone,F.C. and
Feuerstein,G.Z.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /product="secretory leukocyte protease inhibitor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Direct Submission
Submitted (19-SEP-2001) Cardiovascular Sciences, DuPont
Pharmaceuticals, Rt. 141 Experimental Station, E400/3418,
Wilmington, DE 19880, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note="spontaneously hypertensive rats"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           119 MetGlyMetCysGlyLysSerCysValSerProVal 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .680
/organism="Rattus norvegicus"
 Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="mRNA"
/db_xref="taxon:10116"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rattus norvegicus (Norway rat)
Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mRNA, complete cds.
AF421377
AF421377.1 GI:23451267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /codon_start=1
                                US-10-613-105-2 (1-132) x AF151982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note="SLPI"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (bases 1 to 680)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (bases 1 to 680)
 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wang, X.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rattus.
                                                                                                                                                                                                            39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AF421377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
                                                                 ò
                                                                                                g
                                                                                                                                      ò
                                                                                                                                                                     셤
                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                  엄
                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                         요
                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /codon_start=1
/product=1
/product=1 id="ApD34035.1"
/protein_id="ApD34035.1"
/db_xref="G1:4929549"
/translation="MKSGEPLMVLLALGVLAPWSVEGGKNDAIKIGACPARKPAQC
/kranslation="MKSGECQPTGSFKCLNPVPIRGPVKKPGRCLKFQGKCLMINPP
NKCQNDGQCDGKYKCCEGMCGKVCLPPV"
                                                                                                                                                                                                                                                                                                                                             AF151982 667 bp mRNA linear ROD 21-JUL-2004 Rattus norvegicus secretory leukocyte protease inhibitor (SLPI)
                                                                                                                                      246 CGTGGACCAGTGAAGAAGAAGCCTGGGAGGTGCGTCAAATTTCAAGGAAAATGTCTGATG 305
                                                                                                                                                                         LeuAsnProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCys 118
86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         rat secretory
                                                    Chen, D.H., Xu,X.P., Bagchi,M.K. and Bagchi,I.C.
Direct Submission
Submitted (17-MAY-1999) Center for Biomedical Research, The
Population Council, 1230 York Avenue, New York, NY 100021, USA
Location/Qualifiers
                                                                                                    79 ProAsnProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 (bases 1 to 667)
Chen, D., Xu, X., Cheon, Y. P., Bagchi, M.K. and Bagchi, I.C.
Estrogen Induces Expression of Secretory Leukocyte Protease
Inhibitor in Rat Uterus
Biol. Reprod. 71 (2), 508-514 (2004)
                                                                                                                          ::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 (bases 1 to 667)
Chen,D.H., XuX.P., Bagchi,M.K. and Bagchi,I.C.
Moleular cloning and spatio-temporal expression of
leukocyte protease inhibitor (SLPI) in the uterus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           function="serine protease inhibitor"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       667
84
14
30
                                                                                                                                                                                                                                             119 MetGlyMetCysGlyLysSerCysValSerProVal 130
                                                                                                                                                                                                                                                                             366 gagggcargreggaaagrergeerreeceeagre 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Rattus norvegicus"
/mol_type="mRNA"
/strain="SD"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    db_xref="taxon:10116"
...667
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rattus norvegicus (Norway rat)
                                                                                                                                                                                                                                                                                                                                                                                     mRNA, complete cds.
AF151982
AF151982.1 GI:4929548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene="SLPI"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gene="SLPI"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5.16e-27
471.00
74.24%
63.64%
61.81%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unpublished
3 (bases 1 to 667)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13. .405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                7. .667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
Pred. No.:
                                  29
                                                                                                                                                                         66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                    LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene
                                                                                                                                                                                                                                                                                                                    RESULT 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDS
                                                                                                                                                                                                                                                                                                                                    AF151982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORIGIN
                                ò
                                                               셤
                                                                                                    ò
                                                                                                                               g
                                                                                                                                                                         8
                                                                                                                                                                                                        a
                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                             셤
```

38

9

28

237

98

```
PAT 21-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          337
                                                                                                                                                                                                                                                                                                                                   118
                                                                                                                                                                                      59 GlyLygLygLygArgCygCygCygProAspThrCygGlylleLygCygLeuAspProValAspThr 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21 TrpAlaValGluGlySerGlyLys-----SerPheLysAlaGlyValCysProProLys 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pittman, D.D., Feldman, J.L., Shields, K.M. and Trepicchio, W.L. Methods and compositions for diagnosing and treating rheumatoid arthritis
                                                                                                                   21 TrpAlaValGluGlySerGlyLyg-----SerPheLygAlaGlyValCygProProLyg
                                                                                                                                     MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                               1 ATGAAGTCCTGCGGCCTTTTACCTTTCACGGTGCTCCTGCTCTGGGGATCCTGGCACCC
                                                                                                                                                                         39 LysSerAlaGinCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysPro
                                                                                                                                                                                                                                                       178 GGAAAGCAGAGGTGCTGCCAAGATGCTTGCGGTTCCAAGTGCGTGAATCCTGTTCCCATT
                                                                                                                                                                                                                                                                              79 ProAsnProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMet
                                                                                                                                                                                                                                                                                                                                   99 LeuAsnProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MetlysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              396
17
33
33
2
  m N
                                                                                                                                                                                                                                                                                                                                                                                     119 MetGlyMetCyBGlyLyBSerCyBValSerProVal 130
                                                                                                                                                                                                                                                                                                                                                                                                      358 GAGGGTATATGTGGGAAAGTCTGCCTGCCCCGATG 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="probe"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Genetics Institute, LLC (US)
Location/Qualifiers
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX642236 396 bp
Sequence 23 from Patent WO0248310.
AX642236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-613-105-2 (1-132) x AX642236 (1-396)
                                        US-10-613-105-2 (1-132) x AX642233 (1-396)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX642236.1 GI:28474684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.12e-26
463.50
72.73%
59.85%
60.83%
 60.83%
6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX642236/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match:
 Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DRIGIN
  Query
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score:
                                                                                                                   ò
                                                                                                                                             용
                                                                                                                                                                         ò
                                                                                                                                                                                               용
                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                     용
                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                 용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 21-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                            LeudanProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCys 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21 TrpAlavalGluGlySerGlyLyg-----SerPheLygAlaGlyValCygProProLyB 38
                                                                                                                                                                                                                                                                                                                        28
                                                                                                                                                                                                                 20
                                                                                                                                                                                                                                          82
                                                                                                                                                                                                                                                                                                                                                                          GlyLysLysArgCysCysProAspThrCysGlylleLysCysLeuAspProValAspThr 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pittman, D.D., Feldman, J.L., Shields, K.M. and Trepicchio, W.L. Methods and compositions for diagnosing and treating rheumatoid arthritis
                                                                                                                                                                                                                               23 ATGAAGTCCAGCGGCCTGTTCCCTCTCATGGTGCTCCTTGCTCTGGTGTCCTGGCACCC
                                                                                                                                                                                                                                                                                                                       LysSerAlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysPro
                                                                                                                                                                                                                MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                          680
84
114
30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             396
79
17
33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      119 MetGlyMetCysGlyLysSerCysValSerProVal 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .396
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/noTe="Probe"
 NKCQNDGQCDGKYKCCEGMCGKVCLPPV"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Genetics Institute, LLC (US)
Location/Qualiflers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX642233 396 bp
Sequence 20 from Patent W00248310.
AX642233
AX642233.1 GI:28474681
                                                                                                                                                                                      US-10-613-105-2 (1-132) x AF421377 (1-680)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.12e-26
463.50
72.73%
59.85%
                                                                                        5.26e-27
471.00
74.24%
63.64%
61.81%
             23. .97
416. .680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
                                                                                                                                 Best Local Similarity:
                                                                                                                      Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
Pred. No.:
             sig_peptide
                                                                             Alignment Scores
Pred. No.:
                                  polyA_site
ORIGIN
                                                                                                                                                                                                                 н
                                                                                                                                                                                                                                                                                                                       39
                                                                                                                                                                                                                                                                                                                                                                            29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  66
                                                                                                                                               Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX642233
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
```

임

8

ò

요

ઠે

요

ò

g

ઠે

g

ઠે

셤

ઠ

ద

ઠે

9

ठ

ठे

엽

ò

ò

```
/product="secretory leukocyte protease inhibitor"
/protein_id="AAC53140.1"
/db_xref="G1:19453140.1"
/db_xref="G1:19453140.1"
/db_xref="G1:19453140.1"
/db_xref="C1:10454140.1"
/db_xref="MKSC3612"
/db_xref="M
                                                                                                                                                                                                                                                                                                                    MMU88093 · 671 bp mRNA linear ROD 19-APR-1997
Mus musculus secretory leukocyte protease inhibitor mRNA, complete
                                                                       118
246 CGCAAACCAGTGTGGAAGGCTGGGAAGGTGCGTCAAAACTCAGGCAAGATGTATGATG 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bickaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muxidae; Murinae; Mus. 1 (Basea I to 671)
Zitnik, R.J.; Kashem, M.A., Kohno, T., Lyons, D.E., Wright, C.D., Rosen, E., Goldberg, I. and Hayday, A.C.
The cloning and characterization of a murine secretory leukocyte protease inhibitor cDNA
Blochem. Biophys. Res. Commun. 232 (3), 687-697 (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      39 LysSerAlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysPro 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9126337
2 (bases 1 to 671)
2 Innik.R.J., Zhang,J., Kashem,M.A., Kohno,T., Lyons,D.E.,
Wright,C.D., Rosen,E., Goldberg,I. and Hayday,A.C.
Direct Submission
Submitted (31-JAN-1997) Internal Medicine, Yale University, 333
Cedar Street, New Haven, CT 06520, USA
                                                                                                   LeuAsnProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13 ATGAAGTCCTGCGGCCTTTTACCTTTCACGGTGCTCCTGCTCTGGGGATCCTGGCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21 TrpAlaValGluGlySerGlyLyB-----SerPheLyBAlaGlyValCyBProProLyB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .671
/organism="Mus musculus"
/mol_type="mRNA"
/mol_type="mRNA"
/mol_type="taxon:10090"
/ceIl_line="ras-transformed 3T3 cells"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13. .408
/function="serine protease inhibitor"
/codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   671
79
17
33
3
                                                                                                                                                                   119 MetGlyMetCysGlyLysSerCysValSerProVal 130
                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-613-105-2 (1-132) x MMU88093 (1-671)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mus musculus (house mouse)
Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.91e-26
463.50
72.73$
59.85$
60.83$
                                                                                                                                                                                                                                                                                                                                                                                                                     U88093.1 GI:1945382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                              U88093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
                                                                       66
                                                                                                                     306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -
                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE
PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                             MMU88093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                      RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGIN
                                                               ò
                                                                                                             용
                                                                                                                                                                   ò
                                                                                                                                                                                                                   유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 08-JAN-2003
                                             LeuAsnProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCys 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGAAAGCAGAGGTGCTGCCAAGATGCTTGCGGTTCCAAGTGCGTGAATCCTGTTCCATT 245
  Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                            59 GlyLygLygLygArgCygProAgpThrCygGlylleLygCygLeuAspProValAspThr 78
                                                                                                                                                                                                                                               98
                                                                                                                                                                                                                                                                                                                                                                                              40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          59 GlyLygLygLygArgCysCysProAspThrCysGlyIleLygCysLeuAspProValAspThr 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           79 ProAsnProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMet 98
                                                                                                                                                                                                                                                                                                                                                                          MetlysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Argandriccrecedectrirraccriricacedrecrecrirecreegearccreecacec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TrpAlaValGluGlySerGlyLys----SerPheLysAlaGlyValCysProProLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LysSerAlaGinCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysPro
                                                                                                                                                                                                                                             79 ProAsnProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Garcia,T., roman Roman,S., Baron,R., Call,K., Theilhaber,J.,
Connolly,T., Jackson,A., Bushnell,S.E. and Rawadi,G.
Genes involved in osteogenesis, and methods of use
Patent: WO 02081745-A 7 17-OCT-2002;
Aventis Pharma S.A. (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 409
71
117
33
33
                                                                                                                                                                                                                                                                                                                                                                                                                                            119 MetGlyMetCysGlyLysSerCysValSerProVal 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGGGTATATGTGGGAAAGTCTGCCTGCCCCGATG 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   409 bp
Sequence 7 from Patent WO02081745.
AX577885.
AX577885.1 GI:27647093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-613-105-2 (1-132) x AX577885 (1-409)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.16e-26
463.50
72.73%
59.85%
60.83%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                              279
                                                                                                                                                                                               219
                                                                                                                                                                                                                                                                                             159
                                                                                                                                                                                                                                                                                                                                           66
                                                                                                                                                                                                                                                                                                                                                                                           66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            39
                                                39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 41
AX577885
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
```

셤

ò

ð 8 ò

g

ò

셤

```
/translation="MKSCGLLPFTVLLALGILAPWTVEGGKNDAIKIGACPAKKPAQC
LKLEKPQCRTDWECPGKQRCCQDACGSKCVNPVPIRKPVWRKPGRCVKTQARCMMLNP
PNVCQRDGQCDGKYKCCEGICGKVCLPPM"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa, Chordata, Craniata, Vertebrata; Euteleostomi; Mammalia; Eutheria, Rodentia, Sciurognathi, Muridae; Murinae; Mus. L (bases 1 to 682)
Abe,T. Tominaga,Y., Kikuchi,T., Watanabe,A., Satoh,K., Watanabe,Y. and Nukiwa,T.
                                                                                                                                                                                                                                                                                                                                                               ROD 29-OCT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tominaga, Y., Kikuchi, T., Watanabe, A., Satoh, K., Watanabe, Y.
249
                                                                                                                                                       250 CGCAAACCAGTGTGGAGGAAGCCTGGGAGGTGCGTCAAAACTCAGGCAAGATGTATGATG 309
                                                                                                                                                                                       LeuAsnProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCys 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Direct Submission
Submitted (18-MAR-1997) Department of Respiratory Oncology and
Molecular Medicine, Institute of Development, Aging and Cancer,
Tohoku University, 4-1 Seiryomachi, Aoba-ku, Sendai 980-77, Japan
Location/Qualifiers
                                                                                                                   79 ProAsnProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMet 98
                                                     78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro 20
                                                                                                                                                                                                                                                                                                                                                                                Mus musculus secretory leukoprotease inhibitor mRNA, complete cds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bacterial pneumonia causes augmented expression of the secretory leukoprotease inhibitor gene in the murine lung Am. J. Respir. Crit. Care Med. 156 (4 Pt 1), 1235-1240 (1997)
                                                                       GlyLysLysLysArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     product="secretory leukoprotease inhibitor"
    protein id="AAC53394.1"
    db xref="GI:1945451"
                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             682
79
17
33
3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Mus musculus"
/mol_type="mRNA"
/strain="B6CBA [C57Black/6 x CBA]"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                           119 MetGlyMetCysGlyLysSerCysValSerProVal 130
                                                                                                                                                                                                                                                                              370 GAGGGTATATGTGGGAAAGTCTGCCTGCCCCGATG 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative:
                                                                                                                                                                                                                                                                                                                                                                  mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                  ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-613-105-2 (1-132) x MMU94341 (1-682)
                                                                                                                                                                                                                                                                                                                                                                  682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /tissue_type="lung"
14. .409
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /codon start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .94e-26
                                                                                                                                                                                                                                                                                                                                                                                                                  U94341.1 GI:1945450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         463.50
72.73%
59.85%
60.83%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (bases 1 to 682)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Abe, T., Tomina
and Nukiwa, T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Am. J. Re
98011992
                                                                                                                                                                                                                                                                                                                                                                  MMU94341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9351627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mus
                                                                                                                                                                                         66
                                                     59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local S
Query Match:
                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                  KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Мо
..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CDS
                                                                                                                                                                                                                                                                                                                                             MMU94341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score:
                                                                                                                                                                                                                                                                                                                                                                LOCUS
                   유
                                                   ð
                                                                              g
                                                                                                          ठे
                                                                                                                                                  셤
                                                                                                                                                                                       ð
                                                                                                                                                                                                                  원
                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                           임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
```

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. Baumalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. CB (Batheria; Rodentia; Rodentia; Rubin; C. M., Schuler, G. Strausberg, R. L., Feingold, E. A., Grouse, L. H., Derge, J. G., Rlaushi, S. F., Zeeberg, B., Buttow, K. H., Schaefer, C. F., Bhat, N. K., Hopkins, R. F., Jordan, H., Moore, T., Max, S. I., Wang, J., Haich, F., Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G. M., Hong, L., Scheefer, C. F., Brath, N. Garael, M. B., Bonaldo, M. F., Casavant, T. L., Scheefer, C. Raha, S. S., Loquellano, N. A., Peters, G. J., Abramson, R. D., Mullahy, S. J., Boak, S. A., McEwant, F. J., Morley, K. C., Hale, S., Garcia, A. M., Gay, L. J., Hulyk, S. W., Worley, K. C., Hale, S., Garcia, A. M., Gay, L. J., Hulyk, S. W., Sanchez, A., Whiting, M., Madan, A., Young, A. C., Shevchenko, Y., Blakesley, R. Whiting, M., Madan, A., Young, A. C., Shevchenko, Y., Blakesley, R. Whiting, M., Madan, A., Schmutz, J., Myers, R. M., Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BC028509 894 bp mRNA linear ROD 30-JUN-2004 Mus musculus secretory leukocyte protease inhibitor, mRNA (cDNA clone MGC:41142 IMAGE:1513866), complete cds.
                                                                                                            191 GGAAAGCAGAGGTGCTGCCAAGATGCTTGCGGTTCCAAGTGCGTGAATCCTGTTCCCATT 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         311 CTTAACCCTCCCAATGTCTGCCAGAGGACGGGCAGTGTGACGGCAAATACAAGTGCTGT 370
                                                                                                                                                                                                                                                                                                                                                                                                                                     28
                                                                                                                                                                                                                                                                                                                                                                                     86
14 ATGAAGTCCTGCGGCCTTTTACCTTTCACGGTGCTCCTTGCTCTGGGGATCCTGGGCACCC 73
                                                                          21 TrpAlaValGluGlySerGlyLys-----SerPheLysAlaGlyValCysProProLys 38
                                                                                                                                                                                                                                                                                   78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted (23-APR-2002) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                   59 GlyLysLyaArgCysCysProAspThrCysGlyIleLysCysLeuAspProValAspThr
                                                                                                                                                                                 39 LysSerAlaGlnCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99 LeuAsnProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCys
                                                                                                                                                                                                                                                                                                                                                                                     79 ProAsnProIhrArgArgLysProGlyLysCysProValIhrTyrGlyGlnCysLeuMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ġ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Soares, Ph.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
Contact: MGC remail.nih.gov
Tissue Procurement: Marcello Bento Soares,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         119 MetGlyMetCysGlyLysSerCysValSerProVal 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         371 GAGGGTATATGTGGGAAAGTCTGCCTGCCCCGATG 406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mus musculus (house mouse)
Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BC028509.1 GI:20306995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (bases 1 to 894)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Strausberg, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REMARK
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BC028509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                              ò
                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                           පි
                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                               ò
                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
```

```
/translation="wkScGilpFtVillalGilapwTvEgGknDalKigACPAKKPAQC
LKIEKPQCRTDWECPGKQRCCQDACGSKCVNPVPIRKPVWRKPGRCVKTQARCMMLNP
PNVCQRDGQCDGKYKCCEGICGKVCLPPM"
                                                                                                                                                                                                                                                                                                                                                                                               27-FEB-1997
                                                                                                                                                                                                                                                                                                                                                                                         MMU73004 1123 bp mRNA linear ROD 27-FEB-199°
Mus musculus secretory leukocyte protease inhibitor mRNA, complete
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Marayota; Metazoa; Chordata; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 1123)
Jin, F. Y., Nathan, C., Radzioch, D. and Ding, A.
Jin, F. Y., Nathan, C., Radzioch, D. and Ding, A.
Jin, F. Y., Mathan, C., Radzioch, D. and Ding, A.
Jin, R. Y., Mathan, C., Radzioch, D. and Ding, A.
Jin, F. Y., Mathan, C., Radzioch, D. and Ding, A.
Jin, R. Y., Mathan, C., Radzioch, D. and Ding, A.
Jin, R. W. Mathan, C., Radzioch, D. and Ding, A.
Jin, J. W. Wall, Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C. Mathan, C.
LeuAsnProProAsnPheCysGluMetAspGlyGlnCysLysArgAspLeuLysCysCys 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                447 Argaagricingcesectrirraccirircacesiscriciriscriciosesarccisscacc 506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LysseralagincysLeuargTyrLysLysBrogluCysGinSeraspTrpGinCysBro 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MetLysSerSerGlyLeuPheProPheLeuValLeuLeuAlaLeuGlyThrLeuAlaPro 20
                                                                                                                              533 CTTAACCCTCCCAATGTCTGCCAGAGGGACGGGCAGTGTGACGGCAAATACAAGTGCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21 TrpAlavalGluGlySerGlyLyg-----SerPheLygAlaGlyValCysProLyg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Submitted (01-OCT-1996) Medicine, Cornell University Medical College, 1300 York Ave. Box 57, New York, NY 10021, USA Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /codon_start=1
/product="secretory_leukocyte_protease_inhibitor"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1123
79
17
13
3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /function="serine protease inhibitor"
                                                                                                                                                                                                            119 MetGlyMetCysGlyLysSerCysValSerProVal 130
                                                                                                                                                                                                                                                    593 GAGGGTATATGTGGGAAAGTCTGCCTGCCCCGATG 628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 (bases 1 to 1123)
Ding,A., Jin,F.-Y. and Nathan,C.F.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /protein_id="AAC53047.1"
/db_xref="GI:1763263"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-613-105-2 (1-132) x MMU73004 (1-1123)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mus musculus (house mouse)
Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.22e-26
463.50
72.73$
59.85$
60.83$
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  U73004.1 GI:1763262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .1123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9039268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   U73004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
                                                                                            66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local S.
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                     RESULT 45
MMU73004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                            ò
                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                     Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LINL at: http://image.llnl.gov Series: IRAK Plate: 67 Row: j Column: 6 This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 6755573. Location/Qualifiers
                                                                                                                                              Andy Chan, Steve S. Chand, Milliam Chow, Alison Cloutier, Ruth Featherstone, Malachi Griffith, Obi Griffith, Ran Guin, Nancy Liao, Kim MacDonald, Amara Masson, Mike R. Mayo, Josh Moran, Ryan Morin, Parka Olson, Diana Palmquist, Anca Petrescu, Anna Litsa Prahbu, Parvanch Saeedi, WR Santos, Angelique Schnerch, Ursula Skalska, Bunane Smallus, Jeff Stott, Miranda Tsai, George Yang, Jacquie Schein, Asim Siddiqui, Rob Holt, Marco Marra.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /translation="wkscGilpptvillalgilapwtveggkndaikigacpakkpagc
LKLEKPQCRTDWECPGKQRCCQDACGSKCVNPVPIRKPVWRKPGRCVKTQARCMMLNP
PNVCQRDGQCDGKYKCCEGICGKVCLPPM"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      296 TGGACTGTGGAAGGA---GGCAAAATGATGCTATCAAAATTGGGGGCCTGCCTGCTAAA 352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        413 GGAAAGCAGAGGTGCTGCCAAGATGCTTGCGGTTCCAAGTGCGTGAATCCTGTTCCCATT 472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       236 Argaagrecrecegecrirrraccrircacegrecrecriecreregaarceregedee 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlyLysLysArgCysCysProAspThrCysGlylleLysCysLeuAspProValAspThr 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  79 ProAsnProThrArgArgLysProGlyLysCysProValThrTyrGlyGlnCysLeuMet 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MetLysSerSerGlyLeuPheProPheLeuValLeuAlaLeuGlyThrLeuAlaPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21 TrpAlaValGluGlySerGlyLys----SerPheLysAlaGlyValCysProLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LysSerAlaGinCysLeuArgTyrLysLysProGluCysGlnSerAspTrpGlnCysPro
cDNA Library Preparation: M. Bento Soares, University of Iowa cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Genome Sequence Centre, BC Cancer Agency, Vancouver, BC, Canada
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /product="secretory leukocyte protease inhibitor"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /tissue_type="Mammary gland, lactating mouse"
/clone_lib="Soares_mammary_gland_NMLMG"
/hote="DH10B"
/hote="Vector: pT7T3-Pac"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           894
79
117
33
3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="mRNA"
/db_xref="taxon:10090"
/clone="MGC:41142 IMAGE:1513866"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein id="AAH28509.1"
|db_xref="GI:20306996"
|db_xref="LocusID:20568"
|db_xref="MGI:109297"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .894
/organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /db_xref="LocusID:20568"
/db_xref="MGI:109297"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-613-105-2 (1-132) x BC028509 (1-894)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /gene="Slpi"
/codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .894
/gene="Slpi"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2.56e-26
463.50
72.73%
59.85%
60.83%
                                                                                                                              info@bcgsc.bc.ca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DRIGIN
```

38

g

ò ద ò 엄 ò g

ઠે

```
8 6 6 6 6 6
යි දි
```

Search completed: October 24, 2004, 05:07:16 Job time : 3582 secs